## Managerial Accounting, 16e (Garrison)

Chapter 2 Job-Order Costing: Calculating Unit Product Costs
A cost driver is a factor, such as machine-hours, beds occupied, computer time, or flight-hours, that causes direct costs.

Job-order costing systems often use allocation bases that do not reflect how jobs actually use overhead resources.

An employee time ticket is an hour-by-hour summary of the employee's activities throughout the day.

The formula for computing the predetermined overhead rate is:
Predetermined overhead rate $=$ Estimated total manufacturing overhead cost $\div$ Estimated total amount of the allocation base

Generally speaking, when going through the process of computing a predetermined overhead rate, the estimated total manufacturing overhead cost is determined before estimating the amount of the allocation base.

If a job is not completed at year end, then no manufacturing overhead cost would be applied to that job when a predetermined overhead rate is used.

Actual overhead costs are not assigned to jobs in a job costing system.
The amount of overhead applied to a particular job equals the actual amount of overhead caused by the job.

If the overhead rate is computed annually based on the actual costs and activity for the year, the manufacturing overhead assigned to any particular job can be computed as soon as the job is completed.

Job cost sheets contain entries for actual direct material, actual direct labor, and actual manufacturing overhead cost incurred in completing a job.

In a job-order cost system, indirect labor is assigned to a job using information from the employee time ticket.

A job cost sheet is used to record how much a customer pays for the job once the job is completed.

In a job-order costing system, costs are traced to individual units of product. The sum total of such traced costs is called the unit product cost.

The fact that one department may be labor intensive while another department is machine intensive explains in part why multiple predetermined overhead rates are often used in larger companies.

A company will improve job cost accuracy by using multiple overhead rates even if it cannot identify more than one overhead cost driver.

The appeal of using multiple departmental overhead rates is that they presumably provide a more accurate accounting of the costs caused by jobs.

The costs attached to products that have not been sold are included in ending inventory on the balance sheet.

In absorption costing, nonmanufacturing costs are assigned to units of product.
An employee time ticket is an hour-by-hour summary of the employee's activities throughout the day.

A bill of materials is a document that lists the type and quantity of each type of direct material needed to complete a unit of product.

Most countries require some form of absorption costing for external reports.
In a job-order costing system that is based on machine-hours, which of the following formulas is correct?
A) Predetermined overhead rate $=$ Actual manufacturing overhead $\div$ Actual machine-hours B) Predetermined overhead rate $=$ Actual manufacturing overhead $\div$ Estimated machine-hours C)
Predetermined overhead rate $=$ Estimated manufacturing overhead $\div$ Estimated machine-
hours
D) Predetermined overhead rate $=$ Estimated manufacturing overhead $\div$ Actual machine-hours

Which of the following is the correct formula to compute the predetermined overhead rate? A) Predetermined overhead rate $=$ Estimated total units in the allocation base $\div$ Estimated total manufacturing overhead costs
B) Predetermined overhead rate $=$ Estimated total manufacturing overhead costs $\div$ Estimated total units in the allocation base
C) Predetermined overhead rate $=$ Actual total manufacturing overhead costs $\div$ Estimated total units in the allocation base
D) Predetermined overhead rate $=$ Estimated total manufacturing overhead costs $\div$ Actual total units in the allocation base.

Assigning manufacturing overhead to a specific job is complicated by all of the below except:
A) Manufacturing overhead is an indirect cost that is either impossible or difficult to trace to a particular job.
B) Manufacturing overhead is incurred only to support some jobs. C)

Manufacturing overhead consists of both variable and fixed costs.
D) The average cost of actual fixed manufacturing overhead expenses will vary depending on how many units are produced in a period.

Which of the following statements about using a plantwide overhead rate based on direct labor is correct?
A) Using a plantwide overhead rate based on direct labor-hours will ensure that direct labor costs are correctly traced to jobs.
B) Using a plantwide overhead rate based on direct labor costs will ensure that direct labor costs will be correctly traced to jobs.
C) It is often overly simplistic and incorrect to assume that direct labor-hours is a company's only manufacturing overhead cost driver.
D) The labor theory of value ensures that using a plantwide overhead rate based on direct labor will do a reasonably good job of assigning overhead costs to jobs.

Which of the following would usually be found on a job cost sheet under a normal cost system?

## Actual direct material cost

A)
B)
C)
D)

Yes
Yes
No
No

Actual manufacturing overhead cost

## Yes

No
Yes
No

Choice A
Choice B
Choice C
Choice D
Which of the following statements is not correct concerning multiple overhead rate systems? A) A multiple overhead rate system is more complex than a system based on a single plantwide overhead rate.
B) A multiple overhead rate system is usually more accurate than a system based on a single plantwide overhead rate.
C) A company may choose to create a separate overhead rate for each of its production departments.
D) In departments that are relatively labor-intensive, their overhead costs should be applied to jobs based on machine-hours rather than on direct labor-hours.

Johansen Corporation uses a predetermined overhead rate based on direct labor-hours to apply manufacturing overhead to jobs. The Corporation has provided the following estimated costs for the next year:

| Direct materials | $\$$ | 6,000 |
| :--- | ---: | ---: |
| Direct labor | $\$$ | 20,000 |
| Rent on factory building | $\$ 15,000$ |  |
| Sales salaries | $\$ 25,000$ |  |
| Depreciation on factory equipment | $\$ 8,000$ |  |
| Indirect labor | $\$ 12,000$ |  |
| Production supervisor's salary | $\$$ | 15,000 |

Jameson estimates that 20,000 direct labor-hours will be worked during the year. The predetermined overhead rate per hour will be:
$\$ 2.50$ per direct labor-hour
$\$ 2.79$ per direct labor-hour
$\$ 3.00$ per direct labor-hour
$\$ 4.00$ per direct labor-hour
The Silver Corporation uses a predetermined overhead rate to apply manufacturing overhead to jobs. The predetermined overhead rate is based on labor cost in Dept. A and on machine-hours in Dept. B. At the beginning of the year, the Corporation made the following estimates:

|  | Dept. A |  |
| :--- | ---: | ---: |
|  | Dept. B |  |
| Direct labor cost | $\$ 60,000$ | $\$ 40,000$ |
| Manufacturing overhead | $\$ 90,000$ | $\$ 45,000$ |
| Direct labor-hours | 6,000 | 9,000 |
| Machine-hours | 2,000 | 15,000 |

What predetermined overhead rates would be used in Dept. A and Dept. B, respectively? $67 \%$ and $\$ 3.00$
$150 \%$ and $\$ 5.00$
$150 \%$ and $\$ 3.00$
$67 \%$ and $\$ 5.00$

Purves Corporation is using a predetermined overhead rate that was based on estimated total fixed manufacturing overhead of $\$ 121,000$ and 10,000 direct labor-hours for the period. The company incurred actual total fixed manufacturing overhead of $\$ 113,000$ and 10,900 total direct labor-hours during the period. The predetermined overhead rate is closest to:
A) $\$ 10.37$
B) $\$ 12.10$
C) $\$ 11.10$
D) $\$ 11.30$

Reamer Corporation uses a predetermined overhead rate based on machine-hours to apply manufacturing overhead to jobs. The Corporation has provided the following estimated costs for next year:

| Direct materials | $\$ 1,000$ |
| :--- | :--- |
| Direct labor | $\$ 3,000$ |
| Sales commissions | $\$ 4,000$ |
| Salary of production supervisor | $\$ 2,000$ |
| Indirect materials | $\$ 400$ |
| Advertising expense | $\$ 800$ |
| Rent on factory equipment | $\$ 1,000$ |

Reamer estimates that 500 direct labor-hours and 1,000 machine-hours will be worked during the year. The predetermined overhead rate per hour will be:
$\$ 6.80$ per machine-hour
$\$ 6.00$ per machine-hour
$\$ 3.00$ per machine-hour
$\$ 3.40$ per machine-hour
Baj Corporation uses a predetermined overhead rate base on machine-hours that it recalculates at the beginning of each year. The company has provided the following data for the most recent year.

| Estimated total fixed manufacturing overhead from |  |
| :--- | :---: |
| the beginning of the year | $\$ 534,000$ |
| Estimated activity level from the beginning of the year | 30,000 machine-hours |
| Actual total fixed manufacturing overhead | $\$ 487,000$ |
| Actual activity level | 27,400 machine-hours |

The predetermined overhead rate per machine-hour would be closest to:
$\$ 17.80$
\$19.49
\$16.23
\$17.77

Giannitti Corporation bases its predetermined overhead rate on the estimated machinehours for the upcoming year. Data for the upcoming year appear below:

Estimated machine-hours
Estimated variable manufacturing overhead Estimated total fixed manufacturing overhead

36,000
\$ 3.01per machine-hour \$ 1,058,040

The predetermined overhead rate for the recently completed year was closest to:
$\$ 29.39$ per machine-hour
$\$ 32.40$ per machine-hour
$\$ 32.81$ per machine-hour
$\$ 3.01$ per machine-hour
Gilchrist Corporation bases its predetermined overhead rate on the estimated machine-hours for the upcoming year. At the beginning of the most recently completed year, the Corporation estimated the machine-hours for the upcoming year at 79,000 machine-hours. The estimated variable manufacturing overhead was $\$ 7.38$ per machine-hour and the estimated total fixed manufacturing overhead was $\$ 2,347,090$. The predetermined overhead rate for the recently completed year was closest to:
A) $\$ 37.09$ per machine-hour
B) $\$ 36.07$ per machine-hour
C) $\$ 7.38$ per machine-hour
D) $\$ 29.71$ per machine-hour

Dearden Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on machine-hours. The company based its predetermined overhead rate for the current year on total fixed manufacturing overhead cost of $\$ 144,000$, variable manufacturing overhead of $\$ 2.00$ per machine-hour, and 60,000 machine-hours. The predetermined overhead rate is closest to:
A) $\$ 2.40$ per machine-hour
B) $\$ 6.40$ per machine-hour
C) $\$ 4.40$ per machine-hour
D) $\$ 2.00$ per machine-hour

Longobardi Corporation bases its predetermined overhead rate on the estimated labor-hours for the upcoming year. At the beginning of the most recently completed year, the Corporation estimated the labor-hours for the upcoming year at 46,000 labor-hours. The estimated variable manufacturing overhead was $\$ 6.25$ per labor-hour and the estimated total fixed manufacturing overhead was $\$ 1,026,260$. The actual labor-hours for the year turned out to be 41,200 labor-hours. The predetermined overhead rate for the recently completed year was closest to:
A) $\$ 28.56$ per labor-hour
B) $\$ 22.31$ per labor-hour
C) $\$ 6.25$ per labor-hour
D) $\$ 31.16$ per labor-hour

Valvano Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on machine-hours. The company based its predetermined overhead rate for the current year on total fixed manufacturing overhead cost of $\$ 440,000$, variable manufacturing overhead of $\$ 2.20$ per machine-hour, and 50,000 machine-hours.The estimated total manufacturing overhead is closest to:
A) $\$ 440,000$
B) $\$ 110,000$
C) $\$ 440,002$
D) $\$ 550,000$

Brothern Corporation bases its predetermined overhead rate on the estimated machinehours for the upcoming year. Data for the most recently completed year appear below:

Estimates made at the beginning of the year:
Estimated machine-hours
Estimated variable manufacturing overhead
Estimated total fixed manufacturing overhead
Actual machine-hours for the year

$$
39,000
$$

\$ 6.76per machine-hour
\$ 794,430
42,700

The predetermined overhead rate for the recently completed year was closest to:
$\$ 25.37$ per machine-hour
$\$ 27.13$ per machine-hour
$\$ 6.76$ per machine-hour
$\$ 20.37$ per machine-hour
Steele Corporation uses a predetermined overhead rate based on machine-hours to apply manufacturing overhead to jobs. Steele Corporation has provided the following estimated costs for next year:

| Direct materials | $\$ 20,000$ |
| :--- | ---: | ---: |
| Direct labor | $\$ 60,000$ |
| Sales commissions | $\$ 80,000$ |
| Salary of production supervisor | $\$ 40,000$ |
| Indirect materials | $\$ 8,000$ |
| Advertising expense | $\$ 16,000$ |
| Rent on factory equipment | $\$ 20,000$ |

Steele estimates that 10,000 direct labor-hours and 16,000 machine-hours will be worked during the year. The predetermined overhead rate per hour will be:
\$4.25
$\$ 8.00$
\$9.00
\$10.25

Helland Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on direct labor-hours. The company based its predetermined overhead rate for the current year on the following data:

| Total direct labor-hours | 30,000 |
| :--- | ---: |
| Total fixed manufacturing overhead cost | $\$ 189,000$ |
| Variable manufacturing overhead per direct labor-hour | $\$ 8.50$ |

The predetermined overhead rate is closest to:
$\$ 2.50$ per direct labor-hour
$\$ 11.30$ per direct labor-hour
$\$ 6.30$ per direct labor-hour
$\$ 8.80$ per direct labor-hour
Laflame Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on machine-hours. The company based its predetermined overhead rate for the current year on the following data:

Total machine-hours
Total fixed manufacturing overhead cost
Variable manufacturing overhead per machine-hour

70,000
\$ 357,000
\$ 3.90

The estimated total manufacturing overhead is closest to:
\$273,000
\$630,000
\$357,004
\$357,000

Almaraz Corporation has two manufacturing departments-Forming and Finishing. The company used the following data at the beginning of the year to calculate predetermined overhead rates:

|  | Forming |  | Finishing | Total |  |
| :--- | ---: | ---: | ---: | ---: | :---: |
|  |  | 7,000 | 3,000 | 10,000 |  |
| Estimated total machine-hours (MHs) |  |  |  |  |  |
| Estimated total fixed manufacturing overhead cost | $\$$ | 40,600 | $\$$ | 8,100 | $\$ 48,700$ |
| Estimated variable manufacturing overhead cost per |  |  |  |  |  |
| MH | $\$$ | 1.30 | $\$$ | 2.80 |  |

Assume that the company uses a plantwide predetermined manufacturing overhead rate based on machine-hours. That predetermined manufacturing overhead rate is closest to:
\$6.62
\$4.87
\$4.10
\$7.10

Bernson Corporation is using a predetermined overhead rate that was based on estimated total fixed manufacturing overhead of $\$ 492,000$ and 30,000 machine-hours for the period. The company incurred actual total fixed manufacturing overhead of $\$ 517,000$ and 28,300 total machine-hours during the period. The amount of manufacturing overhead that would have been applied to all jobs during the period is closest to:
A) $\$ 464,120$
B) $\$ 492,000$
C) $\$ 487,703$
D) $\$ 25,000$

Beat Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on machine-hours. The company based its predetermined overhead rate for the current year on the following data:

| Total machine-hours | 40,000 |
| :--- | ---: |
| Total fixed manufacturing overhead cost | $\$ 344,000$ |
| Variable manufacturing overhead per machine-hour | $\$ 3.90$ |

Recently, Job M759 was completed. It required 60 machine-hours. The amount of overhead applied to Job M759 is closest to:
\$750
\$516
\$984
\$234

Mundorf Corporation has two manufacturing departments-Forming and Assembly. The company used the following data at the beginning of the year to calculate predetermined overhead rates:

|  | Forming | Assembly | Total |  |  |
| :--- | :---: | ---: | ---: | ---: | :---: |
|  | 9,000 |  | 1,000 | 10,000 |  |
| Estimated total machine-hours (MHs) | $\$$ | 52,200 | $\$$ | 2,400 | $\$ 54,600$ |
| Estimated total fixed manufacturing overhead cost |  |  |  |  |  |
| Estimated variable manufacturing overhead cost <br> per MH | $\$$ | 2.00 | $\$$ | 2.10 |  |

During the most recent month, the company started and completed two jobs-Job B and Job H. There were no beginning inventories. Data concerning those two jobs follow:

|  | Job B | Job H |
| :--- | ---: | ---: |
| Forming machine-hours | 6,100 | 2,900 |
| Assembly machine-hours | 400 | 600 |

Assume that the company uses a plantwide predetermined manufacturing overhead rate based on machine-hours. The amount of manufacturing overhead applied to Job B is closest to:
\$48,555
\$35,490
\$2,988
\$45,567

Parido Corporation has two manufacturing departments - Casting and Assembly. The company used the following data at the beginning of the year to calculate predetermined overhead rates:

|  | Forming | Assembly | Total |  |
| :--- | ---: | ---: | ---: | ---: |
| Estimated total machine-hours (MHs) | 8,000 | 2,000 | 10,000 |  |
| Estimated total fixed manufacturing overhead cost | $\$ 44,000$ | $\$$ | 4,200 | $\$ 48,200$ |

Estimated variable manufacturing overhead cost per MH $\begin{array}{llll}\$ & 1.90 & \$ & 3.00\end{array}$

During the most recent month, the company started and completed two jobs - Job A and Job H. There were no beginning inventories. Data concerning those two jobs follow:

|  | Job A | Job H |
| :--- | ---: | :---: |
| Casting machine-hours | 5,400 | 2,600 |
| Assembly machine-hours | 800 | 1,200 |

Assume that the company uses a plantwide predetermined manufacturing overhead rate based on machine-hours. The amount of manufacturing overhead applied to Job H is closest to:
\$8,328
\$26,372
\$18,316
\$18,044

Juanita Corporation uses a job-order costing system and applies overhead on the basis of direct labor cost. At the end of October, Juanita had one job still in process. The job cost sheet for this job contained the following information:

Direct materials $\quad \$ 480$
Direct labor \$ 150
Manufacturing overhead applied \$600
An additional $\$ 100$ of labor was needed in November to complete this job. For this job, how much should Juanita have transferred to finished goods inventory in November when it was completed?
\$1,330
\$500
\$1,230
\$1,730
Carradine Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on machine-hours. The company based its predetermined overhead rate for the current year on total fixed manufacturing overhead cost of $\$ 105,000$, variable manufacturing overhead of $\$ 3.00$ per machine-hour, and 70,000 machine-hours. The company recently completed Job P233 which required 60 machine-hours. The amount of overhead applied to Job P233 is closest
to: A) $\$ 90$
B) $\$ 270$
C) $\$ 450$
D) $\$ 180$

Fusaro Corporation uses a predetermined overhead rate base on machine-hours that it recalculates at the beginning of each year. The company has provided the following data for the most recent year.

Estimated total fixed manufacturing overhead from
the beginning of the year
Estimated activity level from the beginning of the
year
Actual total fixed manufacturing overhead
Actual activity level
\$ 684,000
40,000 machine-hours
\$ 616,000
37,700 machine-hours

The amount of manufacturing overhead that would have been applied to all jobs during the period is closest to:
\$644,670
\$684,000
\$68,000
\$580,580

Koelsch Corporation has two manufacturing departments - Molding and Customizing. The company used the following data at the beginning of the year to calculate predetermined overhead rates:

|  | Molding | Customizing | Total |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Estimated total machine-hours (MHs) | 1,000 | 9,000 | 10,000 |  |  |
| Estimated total fixed manufacturing overhead cost | $\$ 4,000$ | $\$ 25,200$ | $\$ 29,200$ |  |  |
| Estimated variable manufacturing overhead cost <br> per MH | $\$$ | 2.00 | $\$$ | 3.00 |  |

During the most recent month, the company started and completed two jobs - Job F and Job K.
There were no beginning inventories. Data concerning those two jobs follow:

|  | Job F | Job K |  |
| :--- | ---: | ---: | ---: |
| Direct materials | $\$$ | 12,300 | $\$ 8,400$ |
| Direct labor cost | $\$$ | 18,200 | $\$ 8,800$ |
| Molding machine-hours | 700 | 300 |  |
| Customizing machine-hours |  | 3.600 | 5,400 |

Assume that the company uses a plantwide predetermined manufacturing overhead rate based on machine-hours and uses a markup of $50 \%$ on manufacturing cost to establish selling prices. The calculated selling price for Job K is closest to:
\$72,561
\$79,817
\$24,187
\$48,374
Thach Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on machine-hours. The company based its predetermined overhead rate for the current year on total fixed manufacturing overhead cost of $\$ 665,000$, variable manufacturing overhead of $\$ 3.00$ per machine-hour, and 70,000 machine-hours. Recently, Job T321 was completed with the following characteristics:

| Number of units in the job | 30 |
| :--- | ---: |
| Total machine-hours | 90 |
| Direct materials | $\$$ |
| Direct labor cost | $\$ 2,880$ |

The unit product cost for Job T321 is closest to:
\$117.00
\$58.50
\$154.50
$\$ 51.50$

Tancredi Corporation has two manufacturing departments - Machining and Customizing. The company used the following data at the beginning of the year to calculate predetermined overhead rates:

|  | Molding | Customizing | Total |  |
| :--- | ---: | ---: | ---: | ---: |
|  | 5,000 | 5,000 | 10,000 |  |
| Estimated total machine-hours (MHs) | $\$ 22,000$ | $\$$ | 11,500 | $\$ 33,500$ |
| Estimated total fixed manufacturing overhead cost | $\$ 2.80$ | $\$$ | 3.00 |  |

During the most recent month, the company started and completed two jobs - Job E and Job J. There were no beginning inventories. Data concerning those two jobs follow:

|  |  | Job E | Job J |
| :---: | :---: | :---: | :---: |
| Direct materials | \$ | 12,800 | \$ 7,000 |
| Direct labor cost | \$ | 17,600 | \$ 7,700 |
| Machining machine-hours |  | 3,400 | 1,600 |
| Customizing machine-hours |  | 2,000 | 3,000 |

Assume that the company uses a plantwide predetermined manufacturing overhead rate based on machine-hours. If both jobs are sold during the month, the company's cost of goods sold for the month would be closest to:
\$61,450
\$41,150
\$110,808
\$102,600

Session Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on direct labor-hours. The company based its predetermined overhead rate for the current year on the following data:

Total direct labor-hours
Total fixed manufacturing overhead cost
Variable manufacturing overhead per direct labor-hour

70,000
\$ 511,000
\$ 2.10

Recently, Job K913 was completed with the following characteristics:

| Total direct labor-hours |  | 150 |
| :--- | ---: | ---: |
| Direct materials | $\$$ | 705 |
| Direct labor cost | $\$$ | 4,650 |

The total job cost for Job K913 is closest to:
A) $\$ 6,060$
B) $\$ 2,115$
C) $\$ 6,765$
D) $\$ 5,355$

Pebbles Corporation has two manufacturing departments-Casting and Finishing. The company used the following data at the beginning of the year to calculate predetermined overhead rates:

|  | Casting | Finishing | Total |  |
| :--- | ---: | ---: | ---: | ---: |
| Estimated total machine-hours (MHs) | 2,000 | 3,000 | 5,000 |  |
| Estimated total fixed manufacturing overhead cost | $\$ 9,800$ | $\$$ | 6,300 | $\$ 16,100$ |
| Estimated variable manufacturing overhead cost per |  |  |  |  |
| MH | $\$ 2.00$ | $\$$ | 2.40 |  |

During the most recent month, the company started and completed two jobs - Job A and Job L. There were no beginning inventories. Data concerning those two jobs follow:

|  | Job A | Job L |
| :--- | ---: | ---: |
| Direct materials | $\$$ | 15,400 |

Assume that the company uses a plantwide predetermined manufacturing overhead rate based on machine-hours. The total manufacturing cost assigned to Job L is closest to:

$$
\$ 9,600
$$

\$6,200
\$28,904
\$13,104

Stockmaster Corporation has two manufacturing departments-Forming and Assembly. The company used the following data at the beginning of the year to calculate predetermined overhead rates:

|  | Forming | Assembly | Total |  |
| :--- | ---: | ---: | ---: | :---: |
|  | 5,000 | 5,000 | 10,000 |  |
| Estimated total machine-hours (MHs) | $\$ 27,000$ | $\$$ | 10,500 | $\$ 37,500$ |
| Estimated total fixed manufacturing overhead cost | $\$ 2.10$ | $\$$ | 2.80 |  |

During the most recent month, the company started and completed two jobs - Job C and Job H. There were no beginning inventories. Data concerning those two jobs follow:

|  | Job C | Job H |
| :--- | ---: | :---: |
| Direct materials | $\$ 11,200$ | $\$ 7,500$ |
| Direct labor cost | $\$ 21,900$ | $\$ 7,800$ |
| Forming machine-hours | 3,400 | 1,600 |
| Assembly machine-hours | 2,000 | 3,000 |

Assume that the company uses a plantwide predetermined manufacturing overhead rate based on machine-hours and uses a markup of $40 \%$ on manufacturing cost to establish selling prices. The calculated selling price for Job C is closest to:
\$96,989
\$88,172
\$25,192
\$62,980

Atteberry Corporation has two manufacturing departments - Machining and Finishing. The company used the following data at the beginning of the year to calculate predetermined overhead rates:

|  | Machining | Finishing | Total |  |
| :--- | ---: | ---: | ---: | ---: |
|  |  | 6,000 | 4,000 | 10,000 |
| Estimated total machine-hours (MHs) | $\$ 30,000$ | $\$ 11,200$ | $\$ 41,200$ |  |
| Estimated total fixed manufacturing overhead cost |  |  |  |  |
| Estimated variable manufacturing overhead cost |  |  |  |  |
| per MH | $\$$ | 2.00 | $\$$ | 2.40 |

During the most recent month, the company started and completed two jobs-Job E and Job L. There were no beginning inventories. Data concerning those two jobs follow:

|  | Job E | Job L |
| :--- | ---: | :---: |
| Direct materials | $\$ 13,400$ | $\$ 9,100$ |
| Direct labor cost | $\$ 24,500$ | $\$ 7,000$ |
| Machining machine-hours | 4,100 | 1,900 |
| Finishing machine-hours | 1,600 | 2,400 |

Assume that the company uses a plantwide predetermined manufacturing overhead rate based on machine-hours. The total manufacturing cost assigned to Job E is closest to:
\$24,500
\$35,796
\$13,400
\$73,696
Coates Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on machine-hours. The company based its predetermined overhead rate for the current year on total fixed manufacturing overhead cost of $\$ 249,000$, variable manufacturing overhead of $\$ 3.80$ per machine-hour, and 30,000 machine-hours. The company has provided the following data concerning Job X784 which was recently completed:

Job E's manufacturing cost:

| Number of units in the job | 50 |
| :--- | ---: |
| Total machine-hours | 250 |
| Direct materials | $\$ 70$ |
| Direct labor cost | $\$ 5,500$ |

If the company marks up its unit product costs by $30 \%$ then the selling price for a unit in Job X784 is closest to:
\$253.87
\$233.87
\$53.97
\$155.22

Sutter Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on machine-hours. The company based its predetermined overhead rate for the current year on the following data:

| Total machine-hours | 10,000 |
| :--- | ---: |
| Total fixed manufacturing overhead cost | $\$ 35,000$ |
| Variable manufacturing overhead per machine-hour | $\$ \quad 2.20$ |

Recently, Job T369 was completed with the following characteristics:

Number of units in the job 10
Total machine-hours 40
Direct materials \$ 750
Direct labor cost \$ 1,560

If the company marks up its unit product costs by $20 \%$ then the selling price for a unit in Job T369 is closest to:
A) $\$ 324.56$
B) $\$ 304.56$
C) $\$ 277.20$
D) $\$ 50.76$

Doakes Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on direct labor-hours. The company based its predetermined overhead rate for the current year on the following data:

| Total direct labor-hours | 60,000 |
| :--- | ---: |
| Total fixed manufacturing overhead cost | $\$ 378,000$ |
| Variable manufacturing overhead per direct labor-hour | $\$ 8.20$ |

Recently, Job M843 was completed with the following characteristics:

Number of units in the job $\quad 60$
Total direct labor-hours 120
Direct materials \$ 630
Direct labor cost

The unit product cost for Job M843 is closest to:
A) $\$ 33.75$
B) $\$ 67.50$
C) $\$ 27.50$
D) $\$ 50.50$

Placker Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on machine-hours. The company based its predetermined overhead rate for the current year on total fixed manufacturing overhead cost of $\$ 155,000$, variable manufacturing overhead of $\$ 3.40$ per machine-hour, and 50,000 machine-hours. Recently, Job A881 was completed with the following characteristics:

| Total machine-hours |  | 100 |
| :--- | :--- | ---: |
| Direct materials | $\$$ | 645 |
| Direct labor cost | $\$ 2,300$ |  |

The total job cost for Job A881 is closest to:
\$3,595
\$2,945
\$2,950
\$1,295
Tomey Corporation has two production departments, Forming and Finishing. The company uses a job-order costing system and computes a predetermined overhead rate in each production department. The Forming Department's predetermined overhead rate is based on machine-hours and the Finishing Department's predetermined overhead rate is based on direct labor-hours. At the beginning of the current year, the company had made the following estimates:

|  | Forming | Finishing |  |
| :--- | ---: | ---: | ---: |
| Machine-hours | 18,000 | 14,000 |  |
| Direct labor-hours | 2,000 | 8,000 |  |
| Total fixed manufacturing overhead cost | $\$$ | 99,000 | $\$ 70,400$ |
| Variable manufacturing overhead per machine-hour | $\$$ | 2.10 |  |
| Variable manufacturing overhead per direct labor-hour |  |  | $\$$ |

During the current month the company started and finished Job T617. The following data were recorded for this job:

Job T617:
Machine-hours
Direct labor-hours
Direct materials
Direct labor cost

Forming Finishing
$90 \quad 20$
$30 \quad 60$
\$ 940 \$ 350
\$ 960 \$ 1920

The total job cost for JobT617 is closest to:
\$5,604
\$2,584
\$684
\$3,020

Molash Corporation has two manufacturing departments-Machining and Assembly. The company used the following data at the beginning of the year to calculate predetermined overhead rates:

|  | Machining | Assembly | Total |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Estimated total machine-hours (MHs) | 2000 | 3000 | 5000 |  |  |
| Estimated total fixed manufacturing overhead cost | $\$$ | 9,400 | $\$$ | 8,100 | $\$ 17,500$ |
| Estimated variable manufacturing overhead cost per |  |  |  |  |  |
| MH | $\$$ | 1.80 | $\$$ | 2.40 |  |

During the most recent month, the company started and completed two jobs - Job B and Job L. There were no beginning inventories. Data concerning those two jobs follow:

|  | Job B | Job L |
| :--- | ---: | ---: |
| Direct materials | $\$$ | 14,400 |

Assume that the company uses departmental predetermined overhead rates with machine-hours as the allocation base in both production departments. Further assume that the company uses a markup of $50 \%$ on manufacturing cost to establish selling prices. The calculated selling price for Job L is closest to:
\$40,320
\$41,933
\$13,440
\$26,880

Columbo Corporation has two production departments, Forming and Finishing. The company uses a job-order costing system and computes a predetermined overhead rate in each production department. The Forming Department's predetermined overhead rate is based on machine-hours and the Finishing Department's predetermined overhead rate is based on direct labor-hours. At the beginning of the current year, the company had made the following estimates:

|  | Forming | Finishing |  |
| :--- | ---: | ---: | ---: |
| Machine-hours | 17,000 | 10,000 |  |
| Direct labor-hours |  | 1,000 | 9,000 |
| Total fixed manufacturing overhead cost | $\$$ | 110,500 | $\$ 78,300$ |
| Variable manufacturing overhead per machine-hour | $\$$ | 1.60 |  |
| Variable manufacturing overhead per machine-hour |  |  | $\$$ |

During the current month the company started and finished Job A948. The following data were recorded for this job:

| Job A948: | Forming | Finishing |  |
| :--- | ---: | ---: | ---: |
| Machine-hours | 70 | 30 |  |
| Direct labor-hours |  | 10 |  |
| Direct materials | $\$$ | 650 | $\$$ |
| Direct labor cost | $\$$ | 380 | $\$$ |

If the company marks up its manufacturing costs by $40 \%$ then the selling price for Job A948 would be closest to:
\$6,197.80
\$1,770.80
\$4,427.00
\$6,818.00

Lotz Corporation has two manufacturing departments - Casting and Finishing. The company used the following data at the beginning of the year to calculate predetermined overhead rates:

|  | Casting | Finishing | Total |  |
| :--- | ---: | ---: | ---: | :---: |
|  |  | 2,000 | 8,000 | 10,000 |
| Estimated total machine-hours (MHs) | $\$ 0,200$ | $\$$ | 19,200 | $\$ 29,400$ |
| Estimated total fixed manufacturing overhead cost | $\$$ | 10 |  |  |
| Estimated variable manufacturing overhead cost <br> per MH | $\$$ | 1.20 | $\$$ | 2.20 |

During the most recent month, the company started and completed two jobs - Job F and Job K. There were no beginning inventories. Data concerning those two jobs follow:

Direct materials

| Job F |  | Job K |
| :--- | ---: | ---: |
| $\$$ | 14,400 | $\$ 7,100$ |
| $\$$ | 22,500 | $\$$ |
|  | 1,400 | 600 |
|  | 3,200 | 4,800 |

Assume that the company uses departmental predetermined overhead rates with machine-hours as the allocation base in both production departments. Further assume that the company uses a markup of $50 \%$ on manufacturing cost to establish selling prices. The calculated selling price for Job F is closest to:
\$30,220
\$90,660
\$60,440
\$96,100

Ashe Corporation has two manufacturing departments-Machining and Customizing. The company used the following data at the beginning of the year to calculate predetermined overhead rates:

|  | Machining | Customizing | Total |  |
| :--- | ---: | ---: | ---: | ---: |
| Estimated total machine-hours (MHs) | 1,000 | 4,000 | 5,000 |  |
| Estimated total fixed manufacturing overhead <br> cost | $\$ 4,700$ | $\$$ | 9,200 | $\$ 13,900$ |
| Estimated variable manufacturing overhead cost <br> per MH | $\$ 1.10$ | $\$$ | 2.60 |  |

During the most recent month, the company started and completed two jobs - Job B and Job K. There were no beginning inventories. Data concerning those two jobs follow:

|  | Job B | Job K |
| :--- | ---: | ---: |
| Machining machine-hours | 700 | 300 |
| Customizing machine-hours | 1,600 | 2,400 |

Assume that the company uses departmental predetermined overhead rates with machinehours as the allocation base in both production departments. The manufacturing overhead applied to Job K is closest to:
\$11,760
\$1,740
\$13,716
\$13,500

Boward Corporation has two production departments, Milling and Assembly. The company uses a job-order costing system and computes a predetermined overhead rate in each production department. The Milling Department's predetermined overhead rate is based on machine-hours and the Assembly Department's predetermined overhead rate is based on direct labor-hours. At the beginning of the current year, the company had made the following estimates:

|  | Milling | Assembly |  |
| :--- | ---: | ---: | ---: |
| Machine-hours | 18,000 | 12,000 |  |
| Direct labor-hours | 2,000 | 7,000 |  |
| Total fixed manufacturing overhead cost | $\$ 120,600$ | $\$ 76,300$ |  |
| Variable manufacturing overhead per machine-hour | $\$$ | 2.00 |  |
| Variable manufacturing overhead per direct labor-hour |  |  | $\$$ |

During the current month the company started and finished Job T818. The following data were recorded for this job:

| Job T818: | Milling | Assembly |
| :--- | ---: | ---: |
| Machine-hours | 50 | 30 |
| Direct labor-hours | 10 | 40 |

The total amount of overhead applied in both departments to Job T818 is closest to:
\$1,651
\$608
\$435
\$1,043

Malakan Corporation has two production departments, Machining and Finishing. The company uses a job-order costing system and computes a predetermined overhead rate in each production department. The Machining Department's predetermined overhead rate is based on machine-hours and the Finishing Department's predetermined overhead rate is based on direct labor-hours. At the beginning of the current year, the company had made the following estimates:

|  | Machining | Finishing |
| :--- | ---: | ---: |
|  | 18,000 | 11,000 |
| Machine-hours | 2,000 | 9,000 |
| Direct labor-hours | $\$ 102,600$ | $\$ 96,300$ |
| Total fixed manufacturing overhead cost | $\$$ | 2.10 |
| Variable manufacturing overhead per machine-hour |  | $\$$ |
| Variable manufacturing overhead per direct labor-hour |  |  |

During the current month the company started and finished Job K368. The following data were recorded for this job:

| Job K368: | Machining | Finishing |
| :--- | ---: | ---: |
| Machine-hours | 80 | 30 |
| Direct labor-hours | 20 | 40 |

The amount of overhead applied in the Machining Department to Job K368 is closest to:
$\$ 856.00$
\$168.00
$\$ 624.00$
\$140,400.00

Mahon Corporation has two production departments, Casting and Customizing. The company uses a job-order costing system and computes a predetermined overhead rate in each production department. The Casting Department's predetermined overhead rate is based on machine-hours and the Customizing Department's predetermined overhead rate is based on direct labor-hours. At the beginning of the current year, the company had made the following estimates:

|  | Casting | Customizing |  |
| :--- | ---: | ---: | ---: |
|  | 18,000 | 14,000 |  |
| Machine-hours | 2,000 | 7,000 |  |
| Direct labor-hours | $\$ 124,200$ | $\$ 68,600$ |  |
| Total fixed manufacturing overhead cost | $\$$ | 1.90 |  |
| Variable manufacturing overhead per machine-hour |  | $\$$ | 3.80 |

During the current month the company started and finished Job T138. The following data were recorded for this job:

| Job T138: | Casting | Customizing |
| :--- | ---: | ---: |
| Machine-hours | 70 | 30 |
| Direct labor-hours | 10 | 60 |

The amount of overhead applied in the Customizing Department to Job T138 is closest to:
$\$ 588.00$
\$95,200.00
\$816.00
\$228.00

Marioni Corporation has two manufacturing departments - Forming and Assembly. The company used the following data at the beginning of the year to calculate predetermined overhead rates:

|  | Forming | Assembly | Total |  |
| :--- | ---: | ---: | ---: | :---: |
| Estimated total machine-hours (MHs) | 7,000 | 3,000 | 10,000 |  |
| Estimated total fixed manufacturing overhead cost | $\$ 37,100$ | $\$$ | 9,000 | $\$ 46,100$ |
| Estimated variable manufacturing overhead cost per |  |  |  |  |
| MH | $\$$ | 1.70 | $\$$ | 2.60 |

During the most recent month, the company started and completed two jobs-Job B and Job H. There were no beginning inventories. Data concerning those two jobs follow:

|  | Job B | Job H |
| :--- | ---: | ---: |
| Forming machine-hours | 4,800 | 2,200 |
| Assembly machine-hours | 1,200 | 1,800 |

Assume that the company uses departmental predetermined overhead rates with machinehours as the allocation base in both production departments. The manufacturing overhead applied to Job B is closest to:
\$6,720
\$33,600
\$40,320
\$39,480
Bassett Corporation has two production departments, Milling and Customizing. The company uses a job-order costing system and computes a predetermined overhead rate in each production department. The Milling Department's predetermined overhead rate is based on machine-hours and the Customizing Department's predetermined overhead rate is based on direct labor-hours. At the beginning of the current year, the company had made the following estimates:

|  | Milling | Customizing |
| :--- | ---: | ---: |
| Machine-hours | 16,000 | 12,000 |
| Direct labor-hours | 2,000 | 8,000 |
| Total fixed manufacturing overhead cost | $\$ 118,400$ | $\$ 87,200$ |
| Variable manufacturing overhead per machine-hour | $\$$ | 2.10 |
| Variable manufacturing overhead per direct labor-hour |  |  |

The predetermined overhead rate for the Milling Department is closest to:
$\$ 19.00$ per machine-hour
$\$ 2.10$ per machine-hour
$\$ 9.50$ per machine-hour
$\$ 7.40$ per machine-hour

Fatzinger Corporation has two production departments, Milling and Assembly. The company uses a job-order costing system and computes a predetermined overhead rate in each production department. The Milling Department's predetermined overhead rate is based on machine-hours and the Assembly Department's predetermined overhead rate is based on direct labor-hours. At the beginning of the current year, the company had made the following estimates:

|  | Milling | Assembly |  |
| :--- | ---: | ---: | ---: |
| Machine-hours | 20,000 | 14,000 |  |
| Direct labor-hours | 2,000 | 7,000 |  |
| Total fixed manufacturing overhead cost | $\$ 137,000$ | $\$ 57,400$ |  |
| Variable manufacturing overhead per machine-hour | $\$$ | 2.30 |  |
| Variable manufacturing overhead per direct labor-hour |  |  | $\$$ |

The predetermined overhead rate for the Assembly Department is closest to:
$\$ 8.20$ per direct labor-hour
$\$ 3.40$ per direct labor-hour
$\$ 4.06$ per direct labor-hour
$\$ 11.60$ per direct labor-hour
Swango Corporation has two production departments, Casting and Customizing. The company uses a job-order costing system and computes a predetermined overhead rate in each production department. The Casting Department's predetermined overhead rate is based on machine-hours and the Customizing Department's predetermined overhead rate is based on direct labor-hours. At the beginning of the current year, the company had made the following estimates:

|  | Casting | Customizing |  |
| :--- | ---: | ---: | ---: |
|  | 19,000 | 11,000 |  |
| Machine-hours | 1,000 | 8,000 |  |
| Direct labor-hours | $\$$ | 138,700 | $\$ 86,400$ |
| Total fixed manufacturing overhead cost | $\$$ | 1.60 |  |
| Variable manufacturing overhead per machine-hour |  | $\$$ | 3.00 |

The estimated total manufacturing overhead for the Customizing Department is closest to:
\$24,000
\$110,400
\$86,400
\$60,379

Tarrant Corporation has two manufacturing departments-Casting and Finishing. The company used the following data at the beginning of the year to calculate predetermined overhead rates:

|  | Casting | Finishing | Total |  |
| :--- | ---: | ---: | ---: | ---: |
| Estimated total machine-hours (MHs) | 1,000 | 4,000 | 5,000 |  |
| Estimated total fixed manufacturing overhead cost | $\$ 5,700$ | $\$ 11,200$ | $\$ 16,900$ |  |
| Estimated variable manufacturing overhead cost per |  |  |  |  |
| MH | $\$ 1.30$ | $\$$ | 2.90 |  |

Assume that the company uses departmental predetermined overhead rates with machine-hours as the allocation base in both departments. The departmental predetermined overhead rate in the Casting Department is closest to:
\$5.70
\$1.30
$\$ 5.96$
$\$ 7.00$
Prayer Corporation has two production departments, Machining and Customizing. The company uses a job-order costing system and computes a predetermined overhead rate in each production department. The Machining Department's predetermined overhead rate is based on machine-hours and the Customizing Department's predetermined overhead rate is based on direct labor-hours. At the beginning of the current year, the company had made the following estimates:

|  | Machining | Customizing |
| :--- | ---: | ---: |
|  | 19,000 | 13,000 |
| Machine-hours | 1,000 | 8,000 |
| Direct labor-hours | $\$ 110,200$ | $\$ 68,800$ |
| Total fixed manufacturing overhead cost | $\$$ | 2.00 |
| Variable manufacturing overhead per machine-hour |  |  |
| Variable manufacturing overhead per direct labor-hour |  |  |

The estimated total manufacturing overhead for the Machining Department is closest to:
\$148,200
\$110,200
\$38,000
\$299,725

Camm Corporation has two manufacturing departments-Forming and Assembly. The company used the following data at the beginning of the year to calculate predetermined overhead rates:

|  | Forming | Assembly | Total |  |
| :--- | ---: | ---: | ---: | ---: |
| Estimated total machine-hours (MHs) | 3,000 | 2,000 | 5000 |  |
| Estimated total fixed manufacturing overhead cost | $\$ 12,600$ | $\$ 4,600$ | $\$ 17,200$ |  |
| Estimated variable manufacturing overhead cost per |  |  |  |  |
| MH | $\$ 1.70$ | $\$$ | 2.50 |  |

Assume that the company uses departmental predetermined overhead rates with machine-hours as the allocation base in both departments. The departmental predetermined overhead rate in the Assembly Department is closest to:
\$2.50
\$2.30
\$4.80
\$5.46
Huang Aerospace Corporation manufactures aviation control panels in two departments, Fabrication and Assembly. In the Fabrication department, Huang uses a predetermined overhead rate of $\$ 30$ per machine-hour. In the Assembly department, Huang uses a predetermined overhead rate of $\$ 12$ per direct labor-hour. During the current year, Job \#X2984 incurred the following number of hours in each department:

|  | Fabrication | Assembly |
| :--- | ---: | ---: |
| Machine-hours | 40 | 12 |
| Direct labor-hours | 3 | 25 |

What is the total amount of manufacturing overhead that Huang should have applied to Job \#X2984 during the current year?
\$1,200
\$1,500
\$1,560
\$1,734
Sargent Corporation applies overhead cost to jobs on the basis of $80 \%$ of direct labor cost. If Job 210 shows $\$ 10,000$ of manufacturing overhead cost applied, how much was the direct labor cost on the job?
A) $\$ 12,500$
B) $\$ 11,000$
C) $\$ 8,000$
D) $\$ 10,000$

Kreuzer Corporation is using a predetermined overhead rate of $\$ 22.30$ per machine-hour that was based on estimated total fixed manufacturing overhead of $\$ 446,000$ and 20,000 machine-hours for the period. The company incurred actual total fixed manufacturing overhead of $\$ 409,000$ and 18,200 total machine-hours during the period. The amount of manufacturing overhead that would have been applied to all jobs during the period is closest to:
A) $\$ 446,000$
B) $\$ 37,000$
C) $\$ 372,190$
D) $\$ 405,860$

Kavin Corporation uses a predetermined overhead rate base on machine-hours that it recalculates at the beginning of each year. The company has provided the following data for the most recent year.

Predetermined overhead rate
Estimated total fixed manufacturing overhead from the beginning of the year
Estimated activity level from the beginning of the year
Actual total fixed manufacturing overhead Actual activity level
\$ 23.60 per machine-hour
\$ 708,000
31,000 machine-hours
\$ 752,000
2`,100 machine-hours

The amount of manufacturing overhead that would have been applied to all jobs during the period is closest to:
\$663,160
\$708,000
\$44,000
\$704,373
81) Job 910 was recently completed. The following data have been recorded on its job cost sheet:

Direct materials
Direct labor-hours
Direct labor wage rate
Machine-hours
\$ 3,193
21 labor-hours
\$ $\quad 12$ per labor-hour
166 machine-hours

The Corporation applies manufacturing overhead on the basis of machine-hours. The predetermined overhead rate is $\$ 15$ per machine-hour. The total cost that would be recorded on the job cost sheet for Job 910 would be:
\$3,220
\$3,760
\$5,935
\$3,445

Grib Corporation uses a predetermined overhead rate based on direct labor cost to apply manufacturing overhead to jobs. The predetermined overhead rates for the year are $200 \%$ of direct labor cost for Department A and $50 \%$ of direct labor cost for Department B. Job 436, started and completed during the year, was charged with the following costs:

Direct materials
Dept. A Dept. B
Direct labor
\$ 50,000 \$ 10,000
Manufacturing overhead
The total manufacturing cost assigned to Job 436 was:
\$360,000
\$390,000
\$270,000
\$480,000
The following data have been recorded for recently completed Job 450 on its job cost sheet. Direct materials cost was $\$ 3,044$. A total of 46 direct labor-hours and 104 machine-hours were worked on the job. The direct labor wage rate is $\$ 15$ per labor-hour. The Corporation applies manufacturing overhead on the basis of machine-hours. The predetermined overhead rate is $\$ 13$ per machine-hour. The total cost for the job on its job cost sheet would be:
A) $\$ 4,332$
B) $\$ 3,734$
C) $\$ 3,072$
D) $\$ 5,086$

Dejarnette Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on machine-hours. The company based its predetermined overhead rate for the current year on the following data:

Total machine-hours
Total fixed manufacturing overhead cost
Variable manufacturing overhead per machine-hour
The estimated total manufacturing overhead is closest to:
\$416,003
\$248,000
\$664,000
\$416,000

80,000
\$ 416,000
$\$ \quad 3.10$

Dejarnette Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on machine-hours. The company based its predetermined overhead rate for the current year on the following data:

Total machine-hours
Total fixed manufacturing overhead cost
Variable manufacturing overhead per machine-hour
The predetermined overhead rate is closest to:
$\$ 8.30$ per machine-hour
$\$ 11.40$ per machine-hour
$\$ 5.20$ per machine-hour
$\$ 3.10$ per machine-hour

80,000
\$ 416,000
\$ 3.10

Odonnel Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on direct labor-hours. The company based its predetermined overhead rate for the current year on total fixed manufacturing overhead cost of $\$ 36,000$, variable manufacturing overhead of $\$ 2.80$ per direct labor-hour, and 10,000 direct labor-hours.

The estimated total manufacturing overhead is closest to:
\$64,000
\$36,000
\$28,000
\$36,003

Odonnel Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on direct labor-hours. The company based its predetermined overhead rate for the current year on total fixed manufacturing overhead cost of $\$ 36,000$, variable manufacturing overhead of $\$ 2.80$ per direct labor-hour, and 10,000 direct labor-hours.

The predetermined overhead rate is closest to:
$\$ 2.80$ per direct labor-hour
$\$ 6.40$ per direct labor-hour
$\$ 3.60$ per direct labor-hour
$\$ 9.20$ per direct labor-hour

Morataya Corporation has two manufacturing departments - Machining and Assembly. The company used the following data at the beginning of the year to calculate predetermined overhead rates:

|  | Machining Assembly |  |  |  |
| :--- | ---: | ---: | ---: | ---: |
|  | Total |  |  |  |
|  | 7,000 |  |  | 3,000 |
| Estimated total machine-hours (MHs) | 10,000 |  |  |  |
| Estimated total fixed manufacturing overhead cost | $\$$ | 39,200 | $\$$ | 6,600 | $\mathbf{\$ 4 5 , 8 0 0}$

During the most recent month, the company started and completed two jobs - Job B and Job G. There were no beginning inventories. Data concerning those two jobs follow:

|  | Job B | Job G |
| :--- | :---: | :---: |
| Direct materials | $\$ 14,800$ | $\$ 8,300$ |
| Direct labor cost | $\$ 22,000$ | $\$ 8,900$ |
| Machining machine-hours | 4,800 | 2,200 |
| Assembly machine-hours | 1,200 | 1,800 |

Assume that the company uses a plantwide predetermined manufacturing overhead rate based on machine-hours. That predetermined manufacturing overhead rate is closest to:
$\$ 4.00$
\$7.50
$\$ 4.58$
\$6.54

Morataya Corporation has two manufacturing departments - Machining and Assembly. The company used the following data at the beginning of the year to calculate predetermined overhead rates:

|  | Machining Assembly |  |  |  |
| :--- | ---: | ---: | ---: | ---: |
|  | Total |  |  |  |
|  | 7,000 |  |  | 3,000 |
| Estimated total machine-hours (MHs) | 10,000 |  |  |  |
| Estimated total fixed manufacturing overhead cost | $\$$ | 39,200 | $\$$ | 6,600 | $\mathbf{\$ 4 5 , 8 0 0}$

During the most recent month, the company started and completed two jobs - Job B and Job G. There were no beginning inventories. Data concerning those two jobs follow:

|  | Job B | Job G |
| :--- | :---: | :---: |
| Direct materials | $\$ 14,800$ | $\$ 8,300$ |
| Direct labor cost | $\$ 22,000$ | $\$ 8,900$ |
| Machining machine-hours | 4,800 | 2,200 |
| Assembly machine-hours | 1,200 | 1,800 |

Assume that the company uses a plantwide predetermined manufacturing overhead rate based on machine-hours. The amount of manufacturing overhead applied to Job B is closest to:
\$31,392
\$27,480
\$39,240
\$7,848

Morataya Corporation has two manufacturing departments - Machining and Assembly. The company used the following data at the beginning of the year to calculate predetermined overhead rates:

|  | Machining Assembly |  |  |  |
| :--- | ---: | ---: | ---: | ---: |
|  | Total |  |  |  |
|  | 7,000 |  |  | 3,000 |
| Estimated total machine-hours (MHs) | 10,000 |  |  |  |
| Estimated total fixed manufacturing overhead cost | $\$$ | 39,200 | $\$$ | 6,600 | $\mathbf{\$ 4 5 , 8 0 0}$

During the most recent month, the company started and completed two jobs - Job B and Job G. There were no beginning inventories. Data concerning those two jobs follow:

|  | Job B | Job G |  |
| :--- | :---: | :---: | :---: |
| Direct materials | $\$$ | 14,800 | $\$ 8,300$ |
| Direct labor cost | $\$ 22,000$ | $\$ 8,900$ |  |
| Machining machine-hours | 4,800 | 2,200 |  |
| Assembly machine-hours | 1,200 | 1,800 |  |

Assume that the company uses a plantwide predetermined manufacturing overhead rate based on machine-hours. The amount of manufacturing overhead applied to Job G is closest to:
\$14,388
\$26,160
\$11,772
\$18,320

Housholder Corporation uses a predetermined overhead rate base on machine-hours that it recalculates at the beginning of each year. The company has provided the following data for the most recent year.

| Estimated total fixed manufacturing overhead from the |  |
| :--- | :---: |
| beginning of the year | $\$ 310,000$ |
| Estimated activity level from the beginning of the year | 20,000 machine-hours |
| Actual total fixed manufacturing overhead | $\$ 338,000$ |
| Actual activity level | 18,300 machine-hours |

The predetermined overhead rate is closest to:
\$18.47
\$16.94
\$16.90
\$15.50

Housholder Corporation uses a predetermined overhead rate base on machine-hours that it recalculates at the beginning of each year. The company has provided the following data for the most recent year.

Estimated total fixed manufacturing overhead from the
beginning of the year
Estimated activity level from the beginning of the year
Actual total fixed manufacturing overhead
Actual activity level
\$ 310,000
20,000 machine-hours
\$ 338,000
18,300 machine-hours

The amount of manufacturing overhead that would have been applied to all jobs during the period is closest to:
\$28,000
\$309,270
\$310,000
\$283,650
Gerstein Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on direct labor-hours. The company based its predetermined overhead rate for the current year on total fixed manufacturing overhead cost of $\$ 90,000$, variable manufacturing overhead of $\$ 3.70$ per direct labor-hour, and 50,000 direct labor-hours. The company recently completed Job M800 which required 150 direct labor-hours.

The estimated total manufacturing overhead is closest to:
\$90,000
\$275,000
\$185,000
\$90,004

Gerstein Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on direct labor-hours. The company based its predetermined overhead rate for the current year on total fixed manufacturing overhead cost of $\$ 90,000$, variable manufacturing overhead of $\$ 3.70$ per direct labor-hour, and 50,000 direct labor-hours. The company recently completed Job M800 which required 150 direct labor-hours.

The predetermined overhead rate is closest to:
$\$ 1.80$ per direct labor-hour
$\$ 5.50$ per direct labor-hour
$\$ 9.20$ per direct labor-hour
$\$ 3.70$ per direct labor-hour

Gerstein Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on direct labor-hours. The company based its predetermined overhead rate for the current year on total fixed manufacturing overhead cost of $\$ 90,000$, variable manufacturing overhead of $\$ 3.70$ per direct labor-hour, and 50,000 direct labor-hours. The company recently completed Job M800 which required 150 direct labor-hours.

The amount of overhead applied to Job M800 is closest to:
\$270
\$1,380
\$825
\$555
Krier Corporation uses a predetermined overhead rate that was based on estimated total fixed manufacturing overhead of $\$ 738,000$ and 30,000 direct labor-hours for the period. The company incurred actual total fixed manufacturing overhead of $\$ 792,000$ and 31,500 total direct laborhours during the period.

The predetermined overhead rate is closest to:
\$26.40
\$25.14
\$23.43
\$24.60
Krier Corporation uses a predetermined overhead rate that was based on estimated total fixed manufacturing overhead of $\$ 738,000$ and 30,000 direct labor-hours for the period. The company incurred actual total fixed manufacturing overhead of $\$ 792,000$ and 31,500 total direct laborhours during the period.

The amount of manufacturing overhead that would have been applied to all jobs during the period is closest to:
\$831,600
\$54,000
\$774,900
\$738,000

Harootunian Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on machine-hours. The company based its predetermined overhead rate for the current year on the following data:
Total machine-hours
Total fixed manufacturing overhead cost
Variable manufacturing overhead per machine-hour

Recently, Job T629 was completed with the following characteristics:

Number of units in the job 50
Total machine-hours 200
The amount of overhead applied to Job T629 is closest to:
A) $\$ 1,620$
B) $\$ 780$
C) $\$ 1,200$
D) $\$ 420$

Harootunian Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on machine-hours. The company based its predetermined overhead rate for the current year on the following data:

Total machine-hours
Total fixed manufacturing overhead cost
Variable manufacturing overhead per machine-hour
Recently, Job T629 was completed with the following characteristics:

| Number of units in the job | 50 |
| :--- | ---: |
| Total machine-hours | 200 |

The predetermined overhead rate is closest to:
A) $\$ 8.10$ per machine-hour
B) $\$ 2.10$ per machine-hour
C) $\$ 3.90$ per machine-hour
D) $\$ 6.00$ per machine-hour

Harootunian Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on machine-hours. The company based its predetermined overhead rate for the current year on the following data:

Total machine-hours
Total fixed manufacturing overhead cost
Variable manufacturing overhead per machine-hour

80,000
\$ 312,000
\$ 2.10

Recently, Job T629 was completed with the following characteristics:

Number of units in the job
Total machine-hours 200
The amount of overhead applied to Job T629 is closest to:
A) $\$ 1,620$
B) $\$ 780$
C) $\$ 1,200$
D) $\$ 420$

Dehner Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on direct labor-hours. The company based its predetermined overhead rate for the current year on the following data:

Total direct labor-hours
40,000
Total fixed manufacturing overhead cost
\$ 96,000
Variable manufacturing overhead per direct labor-hour
Recently, Job P951 was completed with the following characteristics:

Number of units in the job
20
Total direct labor-hours 100
Direct materials
\$ 755
Direct labor cost
\$ 4,000
The estimated total manufacturing overhead is closest to:
A) $\$ 120,000$
B) $\$ 96,003$
C) $\$ 96,000$
D) $\$ 216,000$

Dehner Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on direct labor-hours. The company based its predetermined overhead rate for the current year on the following data:

| Total direct labor-hours | 40,000 |
| :--- | ---: |
| Total fixed manufacturing overhead cost | $\$ 96,000$ |
| Variable manufacturing overhead per direct labor-hour | $\$ 3.00$ |

Recently, Job P951 was completed with the following characteristics:

Number of units in the job 20
Total direct labor-hours 100
Direct materials \$ 755
Direct labor cost \$ 4,000
The predetermined overhead rate is closest to:
A) $\$ 2.40$ per direct labor-hour
B) $\$ 3.00$ per direct labor-hour
C) $\$ 8.40$ per direct labor-hour
D) $\$ 5.40$ per direct labor-hour

Dehner Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on direct labor-hours. The company based its predetermined overhead rate for the current year on the following data:

| Total direct labor-hours | 40,000 |
| :--- | ---: |
| Total fixed manufacturing overhead cost | $\$ 96,000$ |
| Variable manufacturing overhead per direct labor-hour | $\$ 3.00$ |

Recently, Job P951 was completed with the following characteristics:

Number of units in the job 20
Total direct labor-hours 100
Direct materials \$ 755
Direct labor cost
\$ 4,000

The amount of overhead applied to Job P951 is closest to:
$\$ 840$
\$300
\$540
\$240

Dehner Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on direct labor-hours. The company based its predetermined overhead rate for the current year on the following data:

| Total direct labor-hours | 40,000 |
| :--- | ---: |
| Total fixed manufacturing overhead cost | $\$ 96,000$ |
| Variable manufacturing overhead per direct labor-hour | $\$ 3.00$ |

Recently, Job P951 was completed with the following characteristics:

Number of units in the job 20
Total direct labor-hours 100
Direct materials \$ 755
Direct labor cost \$ 4,000
The total job cost for Job P951 is closest to:
A) $\$ 4,540$
B) $\$ 4,755$
C) $\$ 1,295$
D) $\$ 5,295$

Dehner Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on direct labor-hours. The company based its predetermined overhead rate for the current year on the following data:

| Total direct labor-hours | 40,000 |
| :--- | ---: |
| Total fixed manufacturing overhead cost | $\$ 96,000$ |
| Variable manufacturing overhead per direct labor-hour | $\$ 3.00$ |

Recently, Job P951 was completed with the following characteristics:

Number of units in the job 20
Total direct labor-hours 100
Direct materials \$ 755
Direct labor cost \$ 4,000
The unit product cost for Job P951 is closest to:
A) $\$ 237.75$
B) $\$ 264.75$
C) $\$ 64.75$
D) $\$ 52.95$

Branin Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on direct labor-hours. The company based its predetermined overhead rate for the current year on total fixed manufacturing overhead cost of $\$ 160,000$, variable manufacturing overhead of $\$ 3.40$ per direct labor- hour, and 80,000 direct labor-hours. The company has provided the following data concerning Job A578 which was recently completed:
Total direct labor-hours 250
Direct materials \$ 715
Direct labor cost $\$ 9,000$

The estimated total manufacturing overhead is closest to:
\$272,000
\$160,000
\$432,000
\$160,003
Branin Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on direct labor-hours. The company based its predetermined overhead rate for the current year on total fixed manufacturing overhead cost of $\$ 160,000$, variable manufacturing overhead of $\$ 3.40$ per direct labor- hour, and 80,000 direct labor-hours. The company has provided the following data concerning Job A578 which was recently completed:

Total direct labor-hours
Direct materials
\$ 715
Direct labor cost
\$ 9,000
The predetermined overhead rate is closest to:
$\$ 8.80$ per direct labor-hour
$\$ 2.00$ per direct labor-hour
$\$ 3.40$ per direct labor-hour
$\$ 5.40$ per direct labor-hour

Branin Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on direct labor-hours. The company based its predetermined overhead rate for the current year on total fixed manufacturing overhead cost of $\$ 160,000$, variable manufacturing overhead of $\$ 3.40$ per direct labor- hour, and 80,000 direct labor-hours. The company has provided the following data concerning Job A578 which was recently completed:
Total direct labor-hours ..... 250
Direct materials ..... \$ 715
Direct labor cost ..... \$ 9,000

The amount of overhead applied to Job A578 is closest to:
\$500
\$1,350
\$2,200
\$850
Branin Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on direct labor-hours. The company based its predetermined overhead rate for the current year on total fixed manufacturing overhead cost of $\$ 160,000$, variable manufacturing overhead of $\$ 3.40$ per direct labor- hour, and 80,000 direct labor-hours. The company has provided the following data concerning Job A578 which was recently completed:

Total direct labor-hours
Direct materials
\$ 715
Direct labor cost
\$ 9,000
The total job cost for Job A578 is closest to:
\$11,065
\$10,350
\$2,065
\$9,715

Spang Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on machine-hours. The company based its predetermined overhead rate for the current year on the following data:

| Total machine-hours | 20,000 |
| :--- | ---: |
| Total fixed manufacturing overhead cost | $\$ 176,000$ |
| Variable manufacturing overhead per machine-hour | $\$ 82.20$ |

Recently, Job P505 was completed with the following characteristics:
Total machine-hours
200
Direct materials \$ 540
Direct labor cost
\$7,200

The amount of overhead applied to Job P505 is closest to:
A) $\$ 2,200$
B) $\$ 1,760$
C) $\$ 2,640$
D) $\$ 440$

Spang Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on machine-hours. The company based its predetermined overhead rate for the current year on the following data:

Total machine-hours
Total fixed manufacturing overhead cost
Variable manufacturing overhead per machine-hour

20,000
\$ 176,000
\$ 2.20

Recently, Job P505 was completed with the following characteristics:

Total machine-hours
200
Direct materials
\$ 540
Direct labor cost
\$ 7,200
The total job cost for Job P505 is closest to:
A) $\$ 9,400$
B) $\$ 9,940$
C) $\$ 7,740$
D) $\$ 2,740$

Opunui Corporation has two manufacturing departments - Molding and Finishing. The company used the following data at the beginning of the year to calculate predetermined overhead rates:

|  | Molding | Finishing | Total |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Estimated total machine-hours (MHs) | 4,000 | 1,000 | 5,000 |  |  |
| Estimated total fixed manufacturing overhead cost | $\$ 19,600$ | $\$$ | 2,400 | $\$ 22,000$ |  |
| Estimated variable manufacturing overhead cost per |  |  |  |  |  |
| MH | $\$$ | 1.10 | $\$$ | 2.10 |  |

During the most recent month, the company started and completed two jobs-Job A and Job M. There were no beginning inventories. Data concerning those two jobs follow:

|  | Job A |  | Job M |
| :--- | ---: | ---: | ---: |
| Direct materials | $\$$ | 13,600 | $\$ 7,500$ |
| Direct labor cost | $\$$ | 20,700 | $\$ 7,400$ |
| Molding machine-hours |  | 2,700 | 1,300 |
| Finishing machine-hours |  | 400 | 600 |

Assume that the company uses a plantwide predetermined manufacturing overhead rate based on machine-hours. The total manufacturing cost assigned to Job M is closest to:
\$10,830
\$7,400
\$25,730
\$7,500

Opunui Corporation has two manufacturing departments - Molding and Finishing. The company used the following data at the beginning of the year to calculate predetermined overhead rates:

|  | Molding | Finishing | Total |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Estimated total machine-hours (MHs) | 4,000 | 1,000 | 5,000 |  |  |
| Estimated total fixed manufacturing overhead cost | $\$ 19,600$ | $\$$ | 2,400 | $\$ 22,000$ |  |
| Estimated variable manufacturing overhead cost per |  |  |  |  |  |
| MH | $\$$ | 1.10 | $\$$ | 2.10 |  |

During the most recent month, the company started and completed two jobs-Job A and Job M. There were no beginning inventories. Data concerning those two jobs follow:

|  | Job A |  | Job M |
| :--- | ---: | ---: | ---: |
| Direct materials | $\$$ | 13,600 | $\$ 7,500$ |
| Direct labor cost | $\$$ | 20,700 | $\$ 7,400$ |
| Molding machine-hours |  | 2,700 | 1,300 |
| Finishing machine-hours |  | 400 | 600 |

Assume that the company uses a plantwide predetermined manufacturing overhead rate based on machine-hours and uses a markup of $40 \%$ on manufacturing cost to establish selling prices. The calculated selling price for Job A is closest to:
\$51,970
\$72,758
\$80,034
\$20,788
Lueckenhoff Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on direct labor-hours. The company based its predetermined overhead rate for the current year on total fixed manufacturing overhead cost of $\$ 497,000$, variable manufacturing overhead of $\$ 2.40$ per direct labor-hour, and 70,000 direct labor-hours. The company has provided the following data concerning Job T498 which was recently completed:

| Number of units in the job | 40 |
| :--- | ---: |
| Total direct labor-hours | 80 |
| Direct materials | $\$ 950$ |
| Direct labor cost | $\$ 2,720$ |

The estimated total manufacturing overhead is closest to:
\$665,000
\$497,002
\$497,000
\$168,000

Lueckenhoff Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on direct labor-hours. The company based its predetermined overhead rate for the current year on total fixed manufacturing overhead cost of $\$ 497,000$, variable manufacturing overhead of $\$ 2.40$ per direct labor-hour, and 70,000 direct labor-hours. The company has provided the following data concerning Job T498 which was recently completed:

| Number of units in the job | 40 |
| :--- | ---: |
| Total direct labor-hours | 80 |
| Direct materials | $\$ 950$ |
| Direct labor cost | $\$ 2,720$ |

The predetermined overhead rate is closest to:
$\$ 11.90$ per direct labor-hour
$\$ 7.10$ per direct labor-hour
$\$ 9.50$ per direct labor-hour
$\$ 2.40$ per direct labor-hour
Lueckenhoff Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on direct labor-hours. The company based its predetermined overhead rate for the current year on total fixed manufacturing overhead cost of \$497,000, variable manufacturing overhead of $\$ 2.40$ per direct labor-hour, and 70,000 direct labor-hours. The company has provided the following data concerning Job T498 which was recently completed:

| Number of units in the job | 40 |
| :--- | ---: |
| Total direct labor-hours | 80 |
| Direct materials | $\$ 950$ |
| Direct labor cost | $\$ 2,720$ |

The amount of overhead applied to Job T498 is closest to:

Lueckenhoff Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on direct labor-hours. The company based its predetermined overhead rate for the current year on total fixed manufacturing overhead cost of $\$ 497,000$, variable manufacturing overhead of $\$ 2.40$ per direct labor-hour, and 70,000 direct labor-hours. The company has provided the following data concerning Job T498 which was recently completed:

| Number of units in the job | 40 |
| :--- | ---: |
| Total direct labor-hours | 80 |
| Direct materials | $\$ 950$ |
| Direct labor cost | $\$ 2,720$ |

The total job cost for Job T498 is closest to:
\$4,430
\$3,670
\$1,710
\$3,480
Lueckenhoff Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on direct labor-hours. The company based its predetermined overhead rate for the current year on total fixed manufacturing overhead cost of $\$ 497,000$, variable manufacturing overhead of $\$ 2.40$ per direct labor-hour, and 70,000 direct labor-hours. The company has provided the following data concerning Job T498 which was recently completed:

| Number of units in the job | 40 |
| :--- | ---: |
| Total direct labor-hours | 80 |
| Direct materials | $\$ 950$ |
| Direct labor cost | $\$ 2,720$ |

The unit product cost for Job T498 is closest to:
\$55.38
\$42.75
\$91.75
\$110.75

Nielsen Corporation has two manufacturing departments - Machining and Assembly. The company used the following data at the beginning of the year to calculate predetermined overhead rates:

|  | Machining | Assembly | Total |  |
| :--- | ---: | ---: | ---: | ---: |
|  | 1,000 | 4,000 | 5,000 |  |
| Estimated total machine-hours (MHs) | $\$, 700$ | $\$$ | 10,800 | $\$ 15,500$ |
| Estimated total fixed manufacturing overhead cost | $\$$ |  |  |  |
| Estimated variable manufacturing overhead cost |  | 1.20 | $\$$ | 2.20 |

During the most recent month, the company started and completed two jobs - Job F and Job M. There were no beginning inventories. Data concerning those two jobs follow:

|  | Job F | Job M |
| :--- | ---: | ---: |
| Direct materials | $\$ 13,000$ | $\$ 7,400$ |
| Direct labor cost | $\$ 20,400$ | $\$ 8,800$ |
| Machining machine-hours |  | 700 |
| Assembly machine-hours |  | 1,600 |

Assume that the company uses a plantwide predetermined manufacturing overhead rate based on machine-hours. The total manufacturing cost assigned to Job F is closest to:
\$13,000
\$20,400
\$45,130
\$11,730

Nielsen Corporation has two manufacturing departments - Machining and Assembly. The company used the following data at the beginning of the year to calculate predetermined overhead rates:

|  | Machining | Assembly | Total |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
|  | 1,000 | 4,000 | 5,000 |  |  |
| Estimated total machine-hours (MHs) | $\$$ | 4,700 | $\$$ | 10,800 | $\$ 15,500$ |
| Estimated total fixed manufacturing overhead cost |  |  |  |  |  |
| Estimated variable manufacturing overhead cost <br> per MH | $\$$ | 1.20 | $\$$ | 2.20 |  |

During the most recent month, the company started and completed two jobs - Job F and Job M. There were no beginning inventories. Data concerning those two jobs follow:

Direct materials

| Job F |  | Job M |
| :--- | ---: | ---: |
| $\$$ | 13,000 | $\$ 7,400$ |
| $\$$ | 20,400 | $\$ 8,800$ |
|  | 700 | 300 |
|  | 1,600 | 2,400 |

Assume that the company uses a plantwide predetermined manufacturing overhead rate based on machine-hours and uses a markup of $40 \%$ on manufacturing cost to establish selling prices. The calculated selling price for Job M is closest to:
\$46,154
\$41,958
\$29,970
\$11,988
Decorte Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on direct labor-hours. The company based its predetermined overhead rate for the current year on the following data:

| Total direct labor-hours | 10,000 |
| :--- | ---: |
| Total fixed manufacturing overhead cost | $\$ 33,000$ |
| Variable manufacturing overhead per direct labor-hour | $\$ 2.50$ |

Recently, Job K332 was completed with the following characteristics:

| Number of units in the job | 70 |
| :--- | ---: |
| Total direct labor-hours | 140 |
| Direct materials | $\$ 455$ |
| Direct labor cost | $\$ 5,320$ |

The amount of overhead applied to Job K332 is closest to:
\$812
\$350
\$462
\$1,162

Decorte Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on direct labor-hours. The company based its predetermined overhead rate for the current year on the following data:

| Total direct labor-hours | 10,000 |
| :--- | ---: |
| Total fixed manufacturing overhead cost | $\$ 33,000$ |
| Variable manufacturing overhead per direct labor-hour | $\$ 2.50$ |

Recently, Job K332 was completed with the following characteristics:

| Number of units in the job | 70 |
| :--- | ---: |
| Total direct labor-hours | 140 |
| Direct materials | $\$ 455$ |
| Direct labor cost | $\$ 5,320$ |

The total job cost for Job K332 is closest to:
\$5,775
\$6,132
\$6,587
\$1,267
Decorte Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on direct labor-hours. The company based its predetermined overhead rate for the current year on the following data:

| Total direct labor-hours | 10,000 |
| :--- | ---: |
| Total fixed manufacturing overhead cost | $\$ 33,000$ |
| Variable manufacturing overhead per direct labor-hour | $\$ 2.50$ |

Recently, Job K332 was completed with the following characteristics:

| Number of units in the job | 70 |
| :--- | ---: |
| Total direct labor-hours | 140 |
| Direct materials | $\$ 455$ |
| Direct labor cost | $\$ 5,320$ |

The unit product cost for Job K332 is closest to:
\$94.10
\$18.10
\$82.50
\$47.05

Beans Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on direct labor-hours. The company based its predetermined overhead rate for the current year on total fixed manufacturing overhead cost of $\$ 162,000$, variable manufacturing overhead of $\$ 2.80$ per direct labor-hour, and 60,000 direct labor-hours. Recently, Job K818 was completed with the following characteristics:

| Number of units in the job | 10 |
| :--- | ---: |
| Total direct labor-hours | 50 |
| Direct materials | $\$ 920$ |
| Direct labor cost | $\$ 1,400$ |

The estimated total manufacturing overhead is closest to:
\$330,000
\$162,000
\$168,000
\$162,003
Beans Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on direct labor-hours. The company based its predetermined overhead rate for the current year on total fixed manufacturing overhead cost of $\$ 162,000$, variable manufacturing overhead of $\$ 2.80$ per direct labor-hour, and 60,000 direct labor-hours. Recently, Job K818 was completed with the following characteristics:

| Number of units in the job | 10 |
| :--- | ---: |
| Total direct labor-hours | 50 |
| Direct materials | $\$ 920$ |
| Direct labor cost | $\$ 1,400$ |

The predetermined overhead rate is closest to:
$\$ 5.50$ per direct labor-hour
$\$ 8.30$ per direct labor-hour
$\$ 2.80$ per direct labor-hour
$\$ 2.70$ per direct labor-hour

Beans Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on direct labor-hours. The company based its predetermined overhead rate for the current year on total fixed manufacturing overhead cost of $\$ 162,000$, variable manufacturing overhead of $\$ 2.80$ per direct labor-hour, and 60,000 direct labor-hours. Recently, Job K818 was completed with the following characteristics:

| Number of units in the job | 10 |
| :--- | ---: |
| Total direct labor-hours | 50 |
| Direct materials | $\$ 920$ |
| Direct labor cost | $\$ 1,400$ |

The amount of overhead applied to Job K818 is closest to:
\$135
\$140
\$415
\$275
Beans Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on direct labor-hours. The company based its predetermined overhead rate for the current year on total fixed manufacturing overhead cost of $\$ 162,000$, variable manufacturing overhead of $\$ 2.80$ per direct labor-hour, and 60,000 direct labor-hours. Recently, Job K818 was completed with the following characteristics:

| Number of units in the job | 10 |
| :--- | ---: |
| Total direct labor-hours | 50 |
| Direct materials | $\$ 920$ |
| Direct labor cost | $\$ 1,400$ |

The total job cost for Job K818 is closest to:
\$1,675
\$2,595
\$1,195
\$2,320

Beans Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on direct labor-hours. The company based its predetermined overhead rate for the current year on total fixed manufacturing overhead cost of $\$ 162,000$, variable manufacturing overhead of $\$ 2.80$ per direct labor-hour, and 60,000 direct labor-hours. Recently, Job K818 was completed with the following characteristics:

| Number of units in the job | 10 |
| :--- | ---: |
| Total direct labor-hours | 50 |
| Direct materials | $\$ 920$ |
| Direct labor cost | $\$ 1,400$ |

The unit product cost for Job K818 is closest to:
\$51.90
$\$ 259.50$
\$232.00
\$119.50

Beans Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on direct labor-hours. The company based its predetermined overhead rate for the current year on total fixed manufacturing overhead cost of $\$ 162,000$, variable manufacturing overhead of $\$ 2.80$ per direct labor-hour, and 60,000 direct labor-hours. Recently, Job K818 was completed with the following characteristics:

| Number of units in the job | 10 |
| :--- | ---: |
| Total direct labor-hours | 50 |
| Direct materials | $\$ 920$ |
| Direct labor cost | $\$ 1,400$ |

If the company marks up its unit product costs by $40 \%$ then the selling price for a unit in Job K818 is closest to:
\$363.30
$\$ 103.80$
\$383.30
\$324.80

Lupo Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on machine-hours. The company based its predetermined overhead rate for the current year on the following data:

| Total machine-hours | 30,000 |
| :--- | ---: |
| Total fixed manufacturing overhead cost | $\$ 252,000$ |
| Variable manufacturing overhead per machine-hour | $\$ 2.10$ |

Recently, Job T687 was completed with the following characteristics:

| Number of units in the job | 10 |
| :--- | ---: |
| Total machine-hours | 30 |
| Direct materials | $\$ 675$ |
| Direct labor cost | $\$ 1,050$ |

The estimated total manufacturing overhead is closest to:
\$315,000
\$252,000
\$252,002
\$63,000
Lupo Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on machine-hours. The company based its predetermined overhead rate for the current year on the following data:

| Total machine-hours | 30,000 |
| :--- | ---: |
| Total fixed manufacturing overhead cost | $\$ 252,000$ |
| Variable manufacturing overhead per machine-hour | $\$ 2.10$ |

Recently, Job T687 was completed with the following characteristics:

| Number of units in the job | 10 |
| :--- | ---: |
| Total machine-hours | 30 |
| Direct materials | $\$ 675$ |
| Direct labor cost | $\$ 1,050$ |

The predetermined overhead rate is closest to:
$\$ 12.60$ per machine-hour
$\$ 10.50$ per machine-hour
$\$ 8.40$ per machine-hour
$\$ 2.10$ per machine-hour

Lupo Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on machine-hours. The company based its predetermined overhead rate for the current year on the following data:

| Total machine-hours | 30,000 |
| :--- | ---: |
| Total fixed manufacturing overhead cost | $\$ 252,000$ |
| Variable manufacturing overhead per machine-hour | $\$ 2.10$ |

Recently, Job T687 was completed with the following characteristics:

| Number of units in the job | 10 |
| :--- | ---: |
| Total machine-hours | 30 |
| Direct materials | $\$ 675$ |
| Direct labor cost | $\$ 1,050$ |

The amount of overhead applied to Job T687 is closest to:

## \$315

\$252
\$378
\$63
Lupo Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on machine-hours. The company based its predetermined overhead rate for the current year on the following data:

| Total machine-hours | 30,000 |
| :--- | ---: |
| Total fixed manufacturing overhead cost | $\$ 252,000$ |
| Variable manufacturing overhead per machine-hour | $\$ 2.10$ |

Recently, Job T687 was completed with the following characteristics:

| Number of units in the job | 10 |
| :--- | ---: |
| Total machine-hours | 30 |
| Direct materials | $\$ 675$ |
| Direct labor cost | $\$ 1,050$ |

The total job cost for Job T687 is closest to:
\$1,365
\$1,725
\$990
\$2,040

Lupo Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on machine-hours. The company based its predetermined overhead rate for the current year on the following data:

| Total machine-hours | 30,000 |
| :--- | ---: |
| Total fixed manufacturing overhead cost | $\$ 252,000$ |
| Variable manufacturing overhead per machine-hour | $\$ 2.10$ |

Recently, Job T687 was completed with the following characteristics:

| Number of units in the job | 10 |
| :--- | ---: |
| Total machine-hours | 30 |
| Direct materials | $\$ 675$ |
| Direct labor cost | $\$ 1,050$ |

The unit product cost for Job T687 is closest to:
$\$ 99.00$
$\$ 68.00$
\$172.50
\$204.00
Lupo Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on machine-hours. The company based its predetermined overhead rate for the current year on the following data:

| Total machine-hours | 30,000 |
| :--- | ---: |
| Total fixed manufacturing overhead cost | $\$ 252,000$ |
| Variable manufacturing overhead per machine-hour | $\$ 2.10$ |

Recently, Job T687 was completed with the following characteristics:

| Number of units in the job | 10 |
| :--- | ---: |
| Total machine-hours | 30 |
| Direct materials | $\$ 675$ |
| Direct labor cost | $\$ 1,050$ |

If the company marks up its unit product costs by $40 \%$ then the selling price for a unit in Job T687 is closest to:
\$81.60
\$305.60
\$285.60
\$241.50

Ronson Corporation has two manufacturing departments - Casting and Customizing. The company used the following data at the beginning of the year to calculate predetermined overhead rates:

|  | Customizing |  |  |  | Total |
| :--- | ---: | ---: | ---: | ---: | :---: |
|  |  | 5,000 |  | 5,000 | 10,000 |
| Estimated total machine-hours (MHs) |  |  |  |  |  |
| Estimated total fixed manufacturing overhead <br> cost | $\$ 27,500$ | $\$$ | 10,500 | $\$ 38,000$ |  |
| Estimated variable manufacturing overhead cost <br> per MH | $\$$ | 1.70 | $\$$ | 2.60 |  |

During the most recent month, the company started and completed two jobs - Job C and Job G. There were no beginning inventories. Data concerning those two jobs follow:

|  | Job C | Job G |  |
| :--- | ---: | ---: | ---: |
| Direct materials | $\$ 10,600$ | $\$ 6,800$ |  |
| Direct labor cost | $\$ 23,700$ | $\$ 87,900$ |  |
| Casting machine-hours | 3,400 | 1,600 |  |
|  |  | 2,000 | 3,000 |

Assume that the company uses a plantwide predetermined manufacturing overhead rate based on machine-hours. The amount of manufacturing overhead applied to Job C is closest to:
\$32,130
\$11,900
\$20,230
\$20,520

Ronson Corporation has two manufacturing departments - Casting and Customizing. The company used the following data at the beginning of the year to calculate predetermined overhead rates:

|  | Customizing |  |  |  | Total |
| :--- | ---: | ---: | ---: | ---: | :---: |
|  |  | 5,000 | 5,000 | 10,000 |  |
| Estimated total machine-hours (MHs) |  |  |  |  |  |
| Estimated total fixed manufacturing overhead <br> cost | $\$ 27,500$ | $\$$ | 10,500 | $\$ 38,000$ |  |
| Estimated variable manufacturing overhead cost <br> per MH | $\$$ | 1.70 | $\$$ | 2.60 |  |

During the most recent month, the company started and completed two jobs - Job C and Job G. There were no beginning inventories. Data concerning those two jobs follow:

|  | Job C | Job G |
| :--- | ---: | ---: |
| Direct materials | $\$ 10,600$ | $\$ 6,800$ |
| Direct labor cost | $\$ 23,700$ | $\$ 87,900$ |
| Casting machine-hours | 3,400 | 1,600 |
|  |  | 2,000 |

Assume that the company uses a plantwide predetermined manufacturing overhead rate based on machine-hours. The total manufacturing cost assigned to Job G is closest to:

$$
\$ 42,070
$$

\$27,370
\$6,800
\$7,900
Sivret Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on machine-hours. The company based its predetermined overhead rate for the current year on the following data:

| Total machine-hours | 80,000 |
| :--- | ---: |
| Total fixed manufacturing overhead cost | $\$ 624,000$ |
| Variable manufacturing overhead per machine-hour | $\$ 3.10$ |

Recently, Job M598 was completed with the following characteristics:

| Number of units in the job | 60 |
| :--- | ---: |
| Total machine-hours | 300 |
| Direct materials | $\$ 645$ |
| Direct labor cost | $\$ 9,000$ |

The amount of overhead applied to Job M598 is closest to:
$\$ 930$
\$4,200
\$2,340
\$3,270

Sivret Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on machine-hours. The company based its predetermined overhead rate for the current year on the following data:

| Total machine-hours | 80,000 |
| :--- | ---: |
| Total fixed manufacturing overhead cost | $\$ 624,000$ |
| Variable manufacturing overhead per machine-hour | $\$ 3.10$ |

Recently, Job M598 was completed with the following characteristics:

| Number of units in the job | 60 |
| :--- | ---: |
| Total machine-hours | 300 |
| Direct materials | $\$ 645$ |
| Direct labor cost | $\$ 9,000$ |

The total job cost for Job M598 is closest to:
\$12,270
\$9,645
\$3,915
\$12,915
Sivret Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on machine-hours. The company based its predetermined overhead rate for the current year on the following data:

| Total machine-hours | 80,000 |
| :--- | ---: |
| Total fixed manufacturing overhead cost | $\$ 624,000$ |
| Variable manufacturing overhead per machine-hour | $\$ 3.10$ |

Recently, Job M598 was completed with the following characteristics:

| Number of units in the job | 60 |
| :--- | ---: |
| Total machine-hours | 300 |
| Direct materials | $\$ 645$ |
| Direct labor cost | $\$ 9,000$ |

The unit product cost for Job M598 is closest to:
\$65.25
\$160.75
\$215.25
\$43.05

Sivret Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on machine-hours. The company based its predetermined overhead rate for the current year on the following data:

| Total machine-hours | 80,000 |
| :--- | ---: |
| Total fixed manufacturing overhead cost | $\$ 624,000$ |
| Variable manufacturing overhead per machine-hour | $\$ 3.10$ |

Recently, Job M598 was completed with the following characteristics:

| Number of units in the job | 60 |
| :--- | ---: |
| Total machine-hours | 300 |
| Direct materials | $\$ 645$ |
| Direct labor cost | $\$ 9,000$ |

If the company marks up its unit product costs by $40 \%$ then the selling price for a unit in Job M598 is closest to:
\$321.35
\$225.05
\$86.10
\$301.35
Levron Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on machine-hours. The company based its predetermined overhead rate for the current year on total fixed manufacturing overhead cost of $\$ 58,000$, variable manufacturing overhead of $\$ 2.00$ per machine-hour, and 20,000 machine-hours. The company has provided the following data concerning Job P978 which was recently completed:

| Number of units in the job | 20 |
| :--- | ---: |
| Total machine-hours | 80 |
| Direct materials | $\$ 500$ |
| Direct labor cost | $\$ 2,640$ |

The predetermined overhead rate is closest to:
$\$ 2.90$ per machine-hour
\$2.00 per machine-hour
$\$ 4.90$ per machine-hour
$\$ 6.90$ per machine-hour

Levron Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on machine-hours. The company based its predetermined overhead rate for the current year on total fixed manufacturing overhead cost of $\$ 58,000$, variable manufacturing overhead of $\$ 2.00$ per machine-hour, and 20,000 machine-hours. The company has provided the following data concerning Job P978 which was recently completed:

| Number of units in the job | 20 |
| :--- | ---: |
| Total machine-hours | 80 |
| Direct materials | $\$ 500$ |
| Direct labor cost | $\$ 2,640$ |

The amount of overhead applied to Job P978 is closest to:
\$232
\$160
\$392
\$552
Levron Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on machine-hours. The company based its predetermined overhead rate for the current year on total fixed manufacturing overhead cost of $\$ 58,000$, variable manufacturing overhead of $\$ 2.00$ per machine-hour, and 20,000 machine-hours. The company has provided the following data concerning Job P978 which was recently completed:

| Number of units in the job | 20 |
| :--- | ---: |
| Total machine-hours | 80 |
| Direct materials | $\$ 500$ |
| Direct labor cost | $\$ 2,640$ |

The total job cost for Job P978 is closest to:
\$3,140
\$892
\$3,532
\$3,032

Levron Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on machine-hours. The company based its predetermined overhead rate for the current year on total fixed manufacturing overhead cost of $\$ 58,000$, variable manufacturing overhead of $\$ 2.00$ per machine-hour, and 20,000 machine-hours. The company has provided the following data concerning Job P978 which was recently completed:

| Number of units in the job | 20 |
| :--- | ---: |
| Total machine-hours | 80 |
| Direct materials | $\$ 500$ |
| Direct labor cost | $\$ 2,640$ |

The unit product cost for Job P978 is closest to:
\$176.60
\$157.00
$\$ 44.60$
\$44.15
Levron Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on machine-hours. The company based its predetermined overhead rate for the current year on total fixed manufacturing overhead cost of $\$ 58,000$, variable manufacturing overhead of $\$ 2.00$ per machine-hour, and 20,000 machine-hours. The company has provided the following data concerning Job P978 which was recently completed:

| Number of units in the job | 20 |
| :--- | ---: |
| Total machine-hours | 80 |
| Direct materials | $\$ 500$ |
| Direct labor cost | $\$ 2,640$ |

If the company marks up its unit product costs by $30 \%$ then the selling price for a unit in Job P978 is closest to:
\$249.58
\$229.58
\$204.10
\$52.98

Bolander Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on machine-hours. The company based its predetermined overhead rate for the current year on the following data:

| Total machine-hours | 70,000 |
| :--- | ---: |
| Total fixed manufacturing overhead cost | $\$ 294,000$ |
| Variable manufacturing overhead per machine-hour | $\$ 2.30$ |

Recently, Job M825 was completed with the following characteristics:

| Number of units in the job | 20 |
| :--- | ---: |
| Total machine-hours | 80 |
| Direct materials | $\$ 665$ |
| Direct labor cost | $\$ 1,840$ |

The predetermined overhead rate is closest to:
$\$ 8.80$ per machine-hour
$\$ 6.50$ per machine-hour
$\$ 2.30$ per machine-hour
$\$ 4.20$ per machine-hour
Bolander Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on machine-hours. The company based its predetermined overhead rate for the current year on the following data:

| Total machine-hours | 70,000 |
| :--- | ---: |
| Total fixed manufacturing overhead cost | $\$ 294,000$ |
| Variable manufacturing overhead per machine-hour | $\$ 2.30$ |

Recently, Job M825 was completed with the following characteristics:

| Number of units in the job | 20 |
| :--- | ---: |
| Total machine-hours | 80 |
| Direct materials | $\$ 665$ |
| Direct labor cost | $\$ 1,840$ |

The amount of overhead applied to Job M825 is closest to:
\$184
\$520
\$704
\$336

Bolander Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on machine-hours. The company based its predetermined overhead rate for the current year on the following data:

| Total machine-hours | 70,000 |
| :--- | ---: |
| Total fixed manufacturing overhead cost | $\$ 294,000$ |
| Variable manufacturing overhead per machine-hour | $\$ 2.30$ |

Recently, Job M825 was completed with the following characteristics:

| Number of units in the job | 20 |
| :--- | ---: |
| Total machine-hours | 80 |
| Direct materials | $\$ 665$ |
| Direct labor cost | $\$ 1,840$ |

The total job cost for Job M825 is closest to:
\$2,360
\$2,505
\$1,185
\$3,025
Bolander Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on machine-hours. The company based its predetermined overhead rate for the current year on the following data:

| Total machine-hours | 70,000 |
| :--- | ---: |
| Total fixed manufacturing overhead cost | $\$ 294,000$ |
| Variable manufacturing overhead per machine-hour | $\$ 2.30$ |

Recently, Job M825 was completed with the following characteristics:

| Number of units in the job | 20 |
| :--- | ---: |
| Total machine-hours | 80 |
| Direct materials | $\$ 665$ |
| Direct labor cost | $\$ 1,840$ |

The unit product cost for Job M825 is closest to:
\$37.81
\$59.25
\$151.25
\$125.25

Bolander Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on machine-hours. The company based its predetermined overhead rate for the current year on the following data:

| Total machine-hours | 70,000 |
| :--- | ---: |
| Total fixed manufacturing overhead cost | $\$ 294,000$ |
| Variable manufacturing overhead per machine-hour | $\$ 2.30$ |

Recently, Job M825 was completed with the following characteristics:

| Number of units in the job | 20 |
| :--- | ---: |
| Total machine-hours | 80 |
| Direct materials | $\$ 665$ |
| Direct labor cost | $\$ 1,840$ |

If the company marks up its unit product costs by $40 \%$ then the selling price for a unit in Job M825 is closest to:
$\$ 60.50$
\$175.35
\$211.75
\$231.75
Cull Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on machine-hours. The company based its predetermined overhead rate for the current year on total fixed manufacturing overhead cost of $\$ 462,000$, variable manufacturing overhead of $\$ 2.20$ per machine-hour, and 60,000 machine-hours. The company has provided the following data concerning Job X455 which was recently completed:

| Number of units in the job | 20 |
| :--- | ---: |
| Total machine-hours | 80 |
| Direct materials | $\$ 940$ |
| Direct labor cost | $\$ 2,240$ |

The amount of overhead applied to Job X455 is closest to:
\$176
\$792
\$968
\$616

Cull Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on machine-hours. The company based its predetermined overhead rate for the current year on total fixed manufacturing overhead cost of $\$ 462,000$, variable manufacturing overhead of $\$ 2.20$ per machine-hour, and 60,000 machine-hours. The company has provided the following data concerning Job X455 which was recently completed:

| Number of units in the job | 20 |
| :--- | ---: |
| Total machine-hours | 80 |
| Direct materials | $\$ 940$ |
| Direct labor cost | $\$ 2,240$ |

The total job cost for Job X455 is closest to:
\$3,972
\$1,732
\$3,180
\$3,032
Cull Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on machine-hours. The company based its predetermined overhead rate for the current year on total fixed manufacturing overhead cost of $\$ 462,000$, variable manufacturing overhead of $\$ 2.20$ per machine-hour, and 60,000 machine-hours. The company has provided the following data concerning Job X455 which was recently completed:

| Number of units in the job | 20 |
| :--- | ---: |
| Total machine-hours | 80 |
| Direct materials | $\$ 940$ |
| Direct labor cost | $\$ 2,240$ |

The unit product cost for Job X455 is closest to:
$\$ 86.60$
$\$ 159.00$
\$198.60
\$49.65

Cull Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on machine-hours. The company based its predetermined overhead rate for the current year on total fixed manufacturing overhead cost of $\$ 462,000$, variable manufacturing overhead of $\$ 2.20$ per machine-hour, and 60,000 machine-hours. The company has provided the following data concerning Job X455 which was recently completed:

| Number of units in the job | 20 |
| :--- | ---: |
| Total machine-hours | 80 |
| Direct materials | $\$ 940$ |
| Direct labor cost | $\$ 2,240$ |

If the company marks up its unit product costs by $20 \%$ then the selling price for a unit in Job X 455 is closest to:
$\$ 258.32$
\$190.80
\$39.72
\$238.32
Kostelnik Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on machine-hours. The company based its predetermined overhead rate for the current year on total fixed manufacturing overhead cost of $\$ 237,000$, variable manufacturing overhead of $\$ 3.90$ per machine-hour, and 30,000 machine-hours. The company has provided the following data concerning Job A496 which was recently completed:

| Number of units in the job | 20 |
| :--- | ---: |
| Total machine-hours | 80 |
| Direct materials | $\$ 500$ |
| Direct labor cost | $\$ 2,160$ |

The amount of overhead applied to Job A496 is closest to:
\$1,256
\$632
\$944
\$312

Kostelnik Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on machine-hours. The company based its predetermined overhead rate for the current year on total fixed manufacturing overhead cost of $\$ 237,000$, variable manufacturing overhead of $\$ 3.90$ per machine-hour, and 30,000 machine-hours. The company has provided the following data concerning Job A496 which was recently completed:

| Number of units in the job | 20 |
| :--- | ---: |
| Total machine-hours | 80 |
| Direct materials | $\$ 500$ |
| Direct labor cost | $\$ 2,160$ |

The total job cost for Job A496 is closest to:
\$2,660
\$3,104
\$3,604
\$1,444
Kostelnik Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on machine-hours. The company based its predetermined overhead rate for the current year on total fixed manufacturing overhead cost of $\$ 237,000$, variable manufacturing overhead of $\$ 3.90$ per machine-hour, and 30,000 machine-hours. The company has provided the following data concerning Job A496 which was recently completed:

| Number of units in the job | 20 |
| :--- | ---: |
| Total machine-hours | 80 |
| Direct materials | $\$ 500$ |
| Direct labor cost | $\$ 2,160$ |

The unit product cost for Job A496 is closest to:
\$133.00
\$72.20
\$45.05
\$180.20

Kostelnik Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on machine-hours. The company based its predetermined overhead rate for the current year on total fixed manufacturing overhead cost of $\$ 237,000$, variable manufacturing overhead of $\$ 3.90$ per machine-hour, and 30,000 machine-hours. The company has provided the following data concerning Job A496 which was recently completed:

| Number of units in the job | 20 |
| :--- | ---: |
| Total machine-hours | 80 |
| Direct materials | $\$ 500$ |
| Direct labor cost | $\$ 2,160$ |

If the company marks up its unit product costs by $40 \%$ then the selling price for a unit in Job A496 is closest to:
\$186.20
\$272.28
\$72.08
\$252.28

Halbur Corporation has two manufacturing departments - Machining and Customizing. The company used the following data at the beginning of the year to calculate predetermined overhead rates:

Estimated total machine-hours (MHs)
Estimated total fixed manufacturing overhead cost
Estimated variable manufacturing overhead cost per MH

| Machining | Customizing | Total |
| ---: | ---: | :--- |
| 6,000 | 4,000 | 10,000 |

\$ 33,600 \$ 10,000 \$ 43,600
\$ $1.80 \quad \$ \quad 2.80$

During the most recent month, the company started and completed two jobs - Job C and Job J. There were no beginning inventories. Data concerning those two jobs follow:

|  | Job C | Job J |  |
| :--- | ---: | ---: | ---: |
| Direct materials | $\$$ | 11,300 | $\$ 8,100$ |
| Direct labor cost | $\$$ | 18,500 | $\$ 6,300$ |
| Machining machine-hours | 4,100 | 1,900 |  |
| Customizing machine-hours |  | 1,600 | 2,400 |

Assume that the company uses a plantwide predetermined manufacturing overhead rate based on machine-hours. The amount of manufacturing overhead applied to Job J is closest to:
\$28,208
\$18,748
\$12,464
\$15,744

Halbur Corporation has two manufacturing departments - Machining and Customizing. The company used the following data at the beginning of the year to calculate predetermined overhead rates:

Estimated total machine-hours (MHs)

| Machining | Customizing | Total |  |
| ---: | ---: | ---: | :--- |
| 6,000 | 4,000 | 10,000 |  |
| $\$ 33,600$ | $\$$ | $10,000 \$$ | 43,600 |
| $\$$ | 1.80 | $\$$ | 2.80 |

During the most recent month, the company started and completed two jobs - Job C and Job J. There were no beginning inventories. Data concerning those two jobs follow:

|  | Job C | Job J |  |
| :--- | ---: | ---: | ---: |
| Direct materials | $\$$ | 11,300 | $\$ 8,100$ |
| Direct labor cost | $\$$ | 18,500 | $\$ 6,300$ |
| Machining machine-hours | 4,100 | 1,900 |  |
| Customizing machine-hours |  | 1,600 | 2,400 |

Assume that the company uses a plantwide predetermined manufacturing overhead rate based on machine-hours. The total manufacturing cost assigned to Job C is closest to:
\$18,500
\$67,192
\$11,300
\$37,392

Prather Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on direct labor-hours. The company based its predetermined overhead rate for the current year on the following data:

Total direct labor-hours
Total fixed manufacturing overhead cost
Variable manufacturing overhead per direct labor-hour

50,000
\$ 285,000
\$ 3.80

Recently, Job P513 was completed with the following characteristics:

Number of units in the job
10
Total direct labor-hours
20
Direct materials
\$ 710
Direct labor cost
\$ 500

The estimated total manufacturing overhead is closest to:
A) $\$ 475,000$
B) $\$ 285,000$
C) $\$ 190,000$
D) $\$ 285,004$

Prather Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on direct labor-hours. The company based its predetermined overhead rate for the current year on the following data:

| Total direct labor-hours | 50,000 |
| :--- | ---: |
| Total fixed manufacturing overhead cost | $\$ 285,000$ |
| Variable manufacturing overhead per direct labor-hour | $\$ 3.80$ |

Recently, Job P513 was completed with the following characteristics:
Number of units in the job ..... 10
Total direct labor-hours ..... 20
Direct materials ..... \$ 710
Direct labor cost ..... \$ 500

The predetermined overhead rate is closest to:
A) $\$ 13.30$ per direct labor-hour
B) $\$ 3.80$ per direct labor-hour
C) $\$ 9.50$ per direct labor-hour
D) $\$ 5.70$ per direct labor-hour

Prather Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on direct labor-hours. The company based its predetermined overhead rate for the current year on the following data:

Total direct labor-hours
50,000
Total fixed manufacturing overhead cost
\$ 285,000
Variable manufacturing overhead per direct labor-hour
\$ 3.80
Recently, Job P513 was completed with the following characteristics:

Number of units in the job
10
Total direct labor-hours
20
Direct materials
\$ 710
Direct labor cost
\$ 500

The amount of overhead applied to Job P513 is closest to:
A) $\$ 76$
B) $\$ 190$
C) $\$ 266$
D) $\$ 114$

Prather Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on direct labor-hours. The company based its predetermined overhead rate for the current year on the following data:

| Total direct labor-hours | 50,000 |
| :--- | ---: |
| Total fixed manufacturing overhead cost | $\$ 285,000$ |
| Variable manufacturing overhead per direct labor-hour | $\$ 3.80$ |

Recently, Job P513 was completed with the following characteristics:

| Number of units in the job | 10 |
| :--- | ---: |
| Total direct labor-hours | 20 |
| Direct materials | $\$ 710$ |
| Direct labor cost | $\$ 500$ |

The total job cost for Job P513 is closest to:
A) $\$ 690$
B) $\$ 900$
C) $\$ 1,400$
D) $\$ 1,210$

Kubes Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on direct labor-hours. The company based its predetermined overhead rate for the current year on total fixed manufacturing overhead cost of $\$ 90,000$, variable manufacturing overhead of $\$ 3.50$ per direct labor-hour, and 30,000 direct labor-hours. The company has provided the following data concerning Job A477which was recently completed:

| Total direct labor-hours | 100 |
| :--- | ---: |
| Direct materials | $\$ 520$ |
| Direct labor cost | $\$ 2,800$ |

The amount of overhead applied to Job A477 is closest to:
\$300
\$350
$\$ 650$
\$1,000

Kubes Corporation uses a job-order costing system with a single plantwide predetermined overhead rate based on direct labor-hours. The company based its predetermined overhead rate for the current year on total fixed manufacturing overhead cost of $\$ 90,000$, variable manufacturing overhead of $\$ 3.50$ per direct labor-hour, and 30,000 direct labor-hours. The company has provided the following data concerning Job A477which was recently completed:

| Total direct labor-hours | 100 |
| :--- | ---: |
| Direct materials | $\$ 520$ |
| Direct labor cost | $\$ 2,800$ |

The total job cost for Job A477 is closest to:
\$3,450
\$1,170
\$3,970
\$3,320

Deloria Corporation has two production departments, Forming and Assembly. The company uses a job-order costing system and computes a predetermined overhead rate in each production department. The Forming Department's predetermined overhead rate is based on machine-hours and the Assembly Department's predetermined overhead rate is based on direct labor-hours. At the beginning of the current year, the company had made the following estimates:

|  | Forming | Assembly |  |
| :--- | ---: | ---: | ---: |
|  | 19,000 | 15,000 |  |
| Machine-hours | 4,000 | 8,000 |  |
| Direct labor-hours | $\$ 129,200$ | $\$ 77,600$ |  |
| Total fixed manufacturing overhead cost | $\$$ | 1.60 |  |
| Variable manufacturing overhead per machine-hour |  | $\$$ | 3.00 |

During the current month the company started and finished Job T288. The following data were recorded for this job:

| Job T288: | Forming |  | Assembly |
| :--- | ---: | ---: | ---: |
| Machine-hours |  | 80 | 10 |
| Direct labor-hours |  | 30 | 40 |
| Direct materials | $\$$ | 730 | $\$ 800$ |
| Direct labor cost | $\$$ | 900 | $\$ 1,200$ |

The estimated total manufacturing overhead for the Assembly Department is closest to:
\$77,600
\$101,600
\$56,674
\$24,000

Deloria Corporation has two production departments, Forming and Assembly. The company uses a job-order costing system and computes a predetermined overhead rate in each production department. The Forming Department's predetermined overhead rate is based on machine-hours and the Assembly Department's predetermined overhead rate is based on direct labor-hours. At the beginning of the current year, the company had made the following estimates:

|  | Forming | Assembly |  |
| :--- | ---: | ---: | ---: |
|  |  | 19,000 | 15,000 |
| Machine-hours |  | 4,000 | 8,000 |
| Direct labor-hours | $\$$ | 129,200 | $\$ 77,600$ |
| Total fixed manufacturing overhead cost | $\$$ | 1.60 |  |
| Variable manufacturing overhead per machine-hour |  |  | $\$$ |

During the current month the company started and finished Job T288. The following data were recorded for this job:

| Job T288: | Forming |  | Assembly |
| :--- | ---: | ---: | ---: |
| Machine-hours |  | 80 | 10 |
| Direct labor-hours |  | 30 | 40 |
| Direct materials | $\$$ | 730 | $\$ 880$ |
| Direct labor cost | $\$$ | 900 | $\$ 1,200$ |

The predetermined overhead rate for the Assembly Department is closest to:
$\$ 3.00$ per direct labor-hour
$\$ 12.70$ per direct labor-hour
$\$ 9.70$ per direct labor-hour
$\$ 5.35$ per direct labor-hour

Deloria Corporation has two production departments, Forming and Assembly. The company uses a job-order costing system and computes a predetermined overhead rate in each production department. The Forming Department's predetermined overhead rate is based on machine-hours and the Assembly Department's predetermined overhead rate is based on direct labor-hours. At the beginning of the current year, the company had made the following estimates:

|  | Forming | Assembly |  |
| :--- | ---: | ---: | ---: |
|  | 19,000 | 15,000 |  |
| Machine-hours | 4,000 | 8,000 |  |
| Direct labor-hours | $\$$ | 129,200 | $\$ 77,600$ |
| Total fixed manufacturing overhead cost | $\$$ | 1.60 |  |
| Variable manufacturing overhead per machine-hour |  | $\$$ | 3.00 |

During the current month the company started and finished Job T288. The following data were recorded for this job:

| Job T288: | Forming |  | Assembly |
| :--- | ---: | ---: | ---: |
| Machine-hours |  | 80 | 10 |
| Direct labor-hours |  | 30 | 40 |
| Direct materials | $\$$ | 730 | $\$ 80$ |
| Direct labor cost | $\$$ | 900 | $\$ 1,200$ |

The amount of overhead applied in the Assembly Department to Job T288 is closest to:
$\$ 508.00$
\$101,600.00
\$388.00
\$120.00

Deloria Corporation has two production departments, Forming and Assembly. The company uses a job-order costing system and computes a predetermined overhead rate in each production department. The Forming Department's predetermined overhead rate is based on machine-hours and the Assembly Department's predetermined overhead rate is based on direct labor-hours. At the beginning of the current year, the company had made the following estimates:

|  | Forming | Assembly |  |
| :--- | ---: | ---: | ---: |
|  | 19,000 | 15,000 |  |
| Machine-hours | 4,000 | 8,000 |  |
| Direct labor-hours | $\$$ | 129,200 | $\$ 77,600$ |
| Total fixed manufacturing overhead cost | $\$$ | 1.60 |  |
| Variable manufacturing overhead per machine-hour |  | $\$$ | 3.00 |

During the current month the company started and finished Job T288. The following data were recorded for this job:

| Job T288: | Forming |  | Assembly |
| :--- | ---: | ---: | ---: |
| Machine-hours |  | 80 | 10 |
| Direct labor-hours |  | 30 | 40 |
| Direct materials | $\$$ | 730 | $\$ 380$ |
| Direct labor cost | $\$$ | 900 | $\$ 1,200$ |

The total amount of overhead applied in both departments to Job T288 is closest to: \$508
\$672
\$1,688
\$1,180

Deloria Corporation has two production departments, Forming and Assembly. The company uses a job-order costing system and computes a predetermined overhead rate in each production department. The Forming Department's predetermined overhead rate is based on machine-hours and the Assembly Department's predetermined overhead rate is based on direct labor-hours. At the beginning of the current year, the company had made the following estimates:

|  | Forming | Assembly |  |
| :--- | ---: | ---: | ---: |
|  |  | 19,000 | 15,000 |
| Machine-hours |  | 4,000 | 8,000 |
| Direct labor-hours | $\$$ | 129,200 | $\$ 77,600$ |
| Total fixed manufacturing overhead cost | $\$$ | 1.60 |  |
| Variable manufacturing overhead per machine-hour |  |  | $\$$ |

During the current month the company started and finished Job T288. The following data were recorded for this job:

| Job T288: | Forming |  | Assembly |
| :--- | ---: | ---: | ---: |
| Machine-hours |  | 80 | 10 |
| Direct labor-hours |  | 30 | 40 |
| Direct materials | $\$$ | 730 | $\$$ |
| Direct labor cost | $\$$ | 900 | $\$ 1,200$ |

The total job cost for Job T288 is closest to:
\$672
\$2,088
\$2,302
\$4,390

Deloria Corporation has two production departments, Forming and Assembly. The company uses a job-order costing system and computes a predetermined overhead rate in each production department. The Forming Department's predetermined overhead rate is based on machine-hours and the Assembly Department's predetermined overhead rate is based on direct labor-hours. At the beginning of the current year, the company had made the following estimates:

|  | Forming | Assembly |  |
| :--- | ---: | ---: | ---: |
|  | 19,000 | 15,000 |  |
| Machine-hours | 4,000 | 8,000 |  |
| Direct labor-hours | $\$$ | 129,200 | $\$ 77,600$ |
| Total fixed manufacturing overhead cost | $\$$ | 1.60 |  |
| Variable manufacturing overhead per machine-hour |  | $\$$ | 3.00 |

During the current month the company started and finished Job T288. The following data were recorded for this job:

| Job T288: | Forming |  | Assembly |
| :--- | ---: | ---: | ---: |
| Machine-hours |  | 80 | 10 |
| Direct labor-hours |  | 30 | 40 |
| Direct materials | $\$$ | 730 | $\$ 880$ |
| Direct labor cost | $\$$ | 900 | $\$ 1,200$ |

If the company marks up its manufacturing costs by $20 \%$ then the selling price for Job T288 would be closest to:
$\$ 4,390.00$
\$878.00
\$5,268.00
\$5,795.00

Macnamara Corporation has two manufacturing departments - Casting and Finishing. The company used the following data at the beginning of the year to calculate predetermined overhead rates:

|  | Casting | Finishing | Total |  |
| :--- | ---: | ---: | ---: | ---: |
| Estimated total machine-hours (MHs) | 1,000 | 4,000 | 5,000 |  |
| Estimated total fixed manufacturing overhead cost | $\$ 4,800$ | $\$ 8,800$ | $\$ 13,600$ |  |
| Estimated variable manufacturing overhead cost per |  |  |  |  |
| MH | $\$ 1.80$ | $\$$ | 2.90 |  |

During the most recent month, the company started and completed two jobs - Job F and Job M. There were no beginning inventories. Data concerning those two jobs follow:

|  | Job F | Job M |  |
| :--- | ---: | ---: | ---: |
| Direct materials | $\$$ | 11,500 | $\$ 9,000$ |
| Direct labor cost | $\$$ | 18,400 | $\$ 7,400$ |
| Casting machine-hours |  | 700 | 300 |
| Finishing machine-hours |  | 1,600 | 2,400 |

Assume that the company uses departmental predetermined overhead rates with machinehours as the allocation base in both production departments. The manufacturing overhead applied to Job F is closest to:
\$4,620
\$12,780
\$12,420
\$8,160

Macnamara Corporation has two manufacturing departments - Casting and Finishing. The company used the following data at the beginning of the year to calculate predetermined overhead rates:

Estimated total machine-hours (MHs)
Estimated total fixed manufacturing overhead cost

| Casting | Finishing | Total |  |
| ---: | ---: | ---: | ---: |
| 1,000 | 4,000 | 5,000 |  |
| $\$ 4,800$ | $\$ 8,800$ | $\$ 13,600$ |  |
| $\$$ | 1.80 | $\$$ | 2.90 |

During the most recent month, the company started and completed two jobs-Job F and Job M. There were no beginning inventories. Data concerning those two jobs follow:

|  | Job F |  | Job M |
| :--- | ---: | ---: | ---: |
| Direct materials | $\$$ | 11,500 | $\$ 9,000$ |
| Direct labor cost | $\$$ | 18,400 | $\$ 7,400$ |
| Casting machine-hours |  | 700 | 300 |
| Finishing machine-hours |  | 1,600 | 2,400 |

Assume that the company uses departmental predetermined overhead rates with machine-hours as the allocation base in both production departments. Further assume that the company uses a markup of $50 \%$ on manufacturing cost to establish selling prices. The calculated selling price for Job M is closest to:
\$15,310
\$47,767
\$30,620
\$45,930

Hickingbottom Corporation has two production departments, Forming and Finishing. The company uses a job-order costing system and computes a predetermined overhead rate in each production department. The Forming Department's predetermined overhead rate is based on machine-hours and the Finishing Department's predetermined overhead rate is based on direct labor-hours. At the beginning of the current year, the company had made the following estimates:

|  | Forming | Finishing |  |
| :--- | ---: | ---: | ---: |
| Machine-hours | 17,000 | 15,000 |  |
| Direct labor-hours | 1,000 | 7,000 |  |
| Total fixed manufacturing overhead cost | $\$$ | 96,900 | $\$ 65,800$ |
| Variable manufacturing overhead per machine-hour | $\$$ | 2.00 |  |
| Variable manufacturing overhead per direct labor-hour |  |  | $\$$ |

During the current month the company started and finished Job M381. The following data were recorded for this job:

| Job M381: | Forming | Finishing |
| :--- | ---: | ---: |
| Machine-hours | 80 | 30 |
| Direct labor-hours | 30 | 40 |
| Direct materials | $\$ 840$ | $\$ 350$ |
| Direct labor cost | $\$ 750$ | $\$ 1,000$ |

The predetermined overhead rate for the Forming Department is closest to:
$\$ 5.70$ per machine-hour
$\$ 7.70$ per machine-hour
$\$ 2.00$ per machine-hour
$\$ 18.70$ per machine-hour

Hickingbottom Corporation has two production departments, Forming and Finishing. The company uses a job-order costing system and computes a predetermined overhead rate in each production department. The Forming Department's predetermined overhead rate is based on machine-hours and the Finishing Department's predetermined overhead rate is based on direct labor-hours. At the beginning of the current year, the company had made the following estimates:

|  | Forming | Finishing |  |
| :--- | ---: | ---: | ---: |
| Machine-hours | 17,000 | 15,000 |  |
| Direct labor-hours | 1,000 | 7,000 |  |
| Total fixed manufacturing overhead cost | $\$$ | 96,900 | $\$ 65,800$ |
| Variable manufacturing overhead per machine-hour | $\$$ | 2.00 |  |
| Variable manufacturing overhead per direct labor-hour |  |  | $\$$ |

During the current month the company started and finished Job M381. The following data were recorded for this job:

Job M381:
Machine-hours
Direct labor-hour
Direct materials
Direct labor cost

| Forming | Finishing |
| ---: | ---: | ---: |
| 80 | 30 |
| 30 | 40 |
| $\$ 840$ | $\$ 350$ |
| $\$ 750$ | $\$ 1,000$ |

The predetermined overhead rate for the Finishing Department is closest to:
$\$ 9.40$ per direct labor-hour
$\$ 13.00$ per direct labor-hour
$\$ 3.60$ per direct labor-hour
$\$ 5.35$ per direct labor-hour

Hickingbottom Corporation has two production departments, Forming and Finishing. The company uses a job-order costing system and computes a predetermined overhead rate in each production department. The Forming Department's predetermined overhead rate is based on machine-hours and the Finishing Department's predetermined overhead rate is based on direct labor-hours. At the beginning of the current year, the company had made the following estimates:

|  | Forming | Finishing |  |
| :--- | ---: | ---: | ---: |
| Machine-hours | 17,000 | 15,000 |  |
| Direct labor-hours | 1,000 | 7,000 |  |
| Total fixed manufacturing overhead cost | $\$$ | 96,900 | $\$ 65,800$ |
| Variable manufacturing overhead per machine-hour | $\$$ | 2.00 |  |
| Variable manufacturing overhead per direct labor-hour |  |  | $\$$ |

During the current month the company started and finished Job M381. The following data were recorded for this job:

Job M381:
Machine-hours
Direct labor-hours
Direct materials
Direct labor cost

Forming Finishing
$80 \quad 30$
$30 \quad 40$
\$ 840 \$ 350
\$ 750 \$ 1,000

The total job cost for Job M381 is closest to:
\$2,206
\$616
\$4,076
\$1,870

Kalp Corporation has two production departments, Machining and Finishing. The company uses a job-order costing system and computes a predetermined overhead rate in each production department. The Machining Department's predetermined overhead rate is based on machinehours and the Finishing Department's predetermined overhead rate is based on direct labor-hours. At the beginning of the current year, the company had made the following estimates:

|  | Machining | Finishing |
| :--- | ---: | ---: |
| Machine-hours | 19,000 | 12,000 |
| Direct labor-hours | 2,000 | 8,000 |
| Total fixed manufacturing overhead cost | $\$ 136,800$ | $\$ 69,600$ |
| Variable manufacturing overhead per machine-hour | $\$$ | 1.80 |
| Variable manufacturing overhead per direct labor-hour |  |  |

During the current month the company started and finished Job K928. The following data were recorded for this job:

| Job K928: | Machining | Finishing |
| :--- | ---: | ---: |
| Machine-hours | 90 | 10 |
| Direct labor-hours | 30 | 50 |
| Direct materials | $\$ 775$ | $\$ 415$ |
| Direct labor cost | $\$ 630$ | $\$ 1,050$ |

The estimated total manufacturing overhead for the Machining Department is closest to:
\$136,800
\$34,200
\$171,000
\$359,100

Kalp Corporation has two production departments, Machining and Finishing. The company uses a job-order costing system and computes a predetermined overhead rate in each production department. The Machining Department's predetermined overhead rate is based on machinehours and the Finishing Department's predetermined overhead rate is based on direct labor-hours. At the beginning of the current year, the company had made the following estimates:

|  | Machining | Finishing |
| :--- | ---: | ---: |
| Machine-hours | 19,000 | 12,000 |
| Direct labor-hours | 2,000 | 8,000 |
| Total fixed manufacturing overhead cost | $\$ 136,800$ | $\$ 69,600$ |
| Variable manufacturing overhead per machine-hour | $\$$ | 1.80 |
| Variable manufacturing overhead per direct labor-hour |  |  |

During the current month the company started and finished Job K928. The following data were recorded for this job:

| Job K928: | Machining | Finishing |
| :--- | ---: | ---: |
| Machine-hours | 90 | 10 |
| Direct labor-hours | 30 | 50 |
| Direct materials | $\$ 775$ | $\$ 415$ |
| Direct labor cost | $\$ 630$ | $\$ 1,050$ |

The predetermined overhead rate for the Machining Department is closest to:
$\$ 7.20$ per machine-hour
$\$ 9.00$ per machine-hour
$\$ 21.38$ per machine-hour
$\$ 1.80$ per machine-hour

Kalp Corporation has two production departments, Machining and Finishing. The company uses a job-order costing system and computes a predetermined overhead rate in each production department. The Machining Department's predetermined overhead rate is based on machinehours and the Finishing Department's predetermined overhead rate is based on direct labor-hours. At the beginning of the current year, the company had made the following estimates:

|  | Machining | Finishing |
| :--- | ---: | ---: |
| Machine-hours | 19,000 | 12,000 |
| Direct labor-hours | 2,000 | 8,000 |
| Total fixed manufacturing overhead cost | $\$ 136,800$ | $\$ 69,600$ |
| Variable manufacturing overhead per machine-hour | $\$$ | 1.80 |
| Variable manufacturing overhead per direct labor-hour |  |  |

During the current month the company started and finished Job K928. The following data were recorded for this job:

| Job K928: | Machining | Finishing |
| :--- | ---: | ---: |
| Machine-hours | 90 | 10 |
| Direct labor-hours | 30 | 50 |
| Direct materials | $\$ 775$ | $\$ 415$ |
| Direct labor cost | $\$ 630$ | $\$ 1,050$ |

The amount of overhead applied in the Machining Department to Job K928 is closest to:
$\$ 783.00$
\$810.00
\$162.00
\$171,000.00

Kalp Corporation has two production departments, Machining and Finishing. The company uses a job-order costing system and computes a predetermined overhead rate in each production department. The Machining Department's predetermined overhead rate is based on machinehours and the Finishing Department's predetermined overhead rate is based on direct labor-hours. At the beginning of the current year, the company had made the following estimates:

|  | Machining | Finishing |
| :--- | ---: | ---: |
| Machine-hours | 19,000 | 12,000 |
| Direct labor-hours | 2,000 | 8,000 |
| Total fixed manufacturing overhead cost | $\$ 136,800$ | $\$ 69,600$ |
| Variable manufacturing overhead per machine-hour | $\$$ | 1.80 |
| Variable manufacturing overhead per direct labor-hour |  |  |

During the current month the company started and finished Job K928. The following data were recorded for this job:

| Job K928: | Machining | Finishing |
| :--- | ---: | ---: |
| Machine-hours | 90 | 10 |
| Direct labor-hours | 30 | 50 |
| Direct materials | $\$ 775$ | $\$ 15$ |
| Direct labor cost | $\$ 630$ | $\$ 1,050$ |

The total amount of overhead applied in both departments to Job K928 is closest to:
\$1,405
\$2,000
\$810
\$595

Kalp Corporation has two production departments, Machining and Finishing. The company uses a job-order costing system and computes a predetermined overhead rate in each production department. The Machining Department's predetermined overhead rate is based on machinehours and the Finishing Department's predetermined overhead rate is based on direct labor-hours. At the beginning of the current year, the company had made the following estimates:

|  | Machining | Finishing |
| :--- | ---: | ---: |
| Machine-hours | 19,000 | 12,000 |
| Direct labor-hours | 2,000 | 8,000 |
| Total fixed manufacturing overhead cost | $\$ 136,800$ | $\$ 69,600$ |
| Variable manufacturing overhead per machine-hour | $\$$ | 1.80 |
| Variable manufacturing overhead per direct labor-hour |  |  |

During the current month the company started and finished Job K928. The following data were recorded for this job:

| Job K928: | Machining | Finishing |
| :--- | ---: | ---: |
| Machine-hours | 90 | 10 |
| Direct labor-hours | 30 | 50 |
| Direct materials | $\$ 775$ | $\$ 15$ |
| Direct labor cost | $\$ 630$ | $\$ 1,050$ |

The total job cost for Job K928 is closest to:
\$810
\$4,275
\$2,060
\$2,215

Kalp Corporation has two production departments, Machining and Finishing. The company uses a job-order costing system and computes a predetermined overhead rate in each production department. The Machining Department's predetermined overhead rate is based on machinehours and the Finishing Department's predetermined overhead rate is based on direct labor-hours. At the beginning of the current year, the company had made the following estimates:

|  | Machining | Finishing |
| :--- | ---: | ---: |
| Machine-hours | 19,000 | 12,000 |
| Direct labor-hours | 2,000 | 8,000 |
| Total fixed manufacturing overhead cost | $\$ 136,800$ | $\$ 69,600$ |
| Variable manufacturing overhead per machine-hour | $\$$ | 1.80 |
| Variable manufacturing overhead per direct labor-hour |  |  |

During the current month the company started and finished Job K928. The following data were recorded for this job:

| Job K928: | Machining | Finishing |
| :--- | ---: | ---: |
| Machine-hours | 90 | 10 |
| Direct labor-hours | 30 | 50 |
| Direct materials | $\$ 775$ | $\$ 415$ |
| Direct labor cost | $\$ 630$ | $\$ 1,050$ |

If the company marks up its manufacturing costs by $20 \%$ then the selling price for Job K928 would be closest to:
\$4,275.00
\$5,643.00
\$5,130.00
$\$ 855.00$

Janicki Corporation has two manufacturing departments - Machining and Customizing. The company used the following data at the beginning of the year to calculate predetermined overhead rates:

|  | Machining | Customizing | Total |  |  |
| :--- | ---: | ---: | ---: | ---: | :---: |
|  | 1,000 | 9,000 | 10,000 |  |  |
| Estimated total machine-hours (MHs) | $\$ 4,800$ | $\$$ | 23,400 | $\$ 28,200$ |  |
| Estimated total fixed manufacturing overhead <br> cost | $\$$ | 1.10 | $\$$ | 2.50 |  |
| Estimated variable manufacturing overhead cost <br> per MH | $\$$ |  |  |  |  |

During the most recent month, the company started and completed two jobs - Job A and Job J. There were no beginning inventories. Data concerning those two jobs follow:

|  | Job A | Job J |  |
| :--- | ---: | ---: | ---: |
| Direct materials | $\$$ | 12,000 | $\$$ |
| 7,700 |  |  |  |
| Direct labor cost | $\$$ | 20,700 | $\$$ |
| Machining machine-hours | 700 | 300 |  |
| Customizing machine-hours |  | 3,600 | 5,400 |

Assume that the company uses a plantwide predetermined manufacturing overhead rate based on machine-hours and uses a markup of $50 \%$ on manufacturing cost to establish selling prices. The calculated selling price for Job A is closest to:
\$90,707
\$27,487
\$82,461
\$54,974

Janicki Corporation has two manufacturing departments - Machining and Customizing. The company used the following data at the beginning of the year to calculate predetermined overhead rates:

|  | Machining | Customizing | Total |  |  |
| :--- | ---: | ---: | ---: | ---: | :---: |
|  | 1,000 | 9,000 | 10,000 |  |  |
| Estimated total machine-hours (MHs) | $\$ 4,800$ | $\$$ | 23,400 | $\$ 28,200$ |  |
| Estimated total fixed manufacturing overhead <br> cost | $\$$ | 1.10 | $\$$ | 2.50 |  |
| Estimated variable manufacturing overhead cost <br> per MH | $\$$ |  |  |  |  |

During the most recent month, the company started and completed two jobs - Job A and Job J. There were no beginning inventories. Data concerning those two jobs follow:

|  | Job A | Job J |  |
| :--- | ---: | ---: | ---: |
| Direct materials | $\$$ | 12,000 | $\$$ |
| 7,700 |  |  |  |
| Direct labor cost | $\$ 20,700$ | $\$ 8,400$ |  |
| Machining machine-hours |  | 700 | 300 |
| Customizing machine-hours |  | 3,600 | 5,400 |

Assume that the company uses a plantwide predetermined manufacturing overhead rate based on machine-hours and uses a markup of $50 \%$ on manufacturing cost to establish selling prices. The calculated selling price for Job J is closest to:
\$71,983
\$65,439
\$43,626
\$21,813

Janicki Corporation has two manufacturing departments - Machining and Customizing. The company used the following data at the beginning of the year to calculate predetermined overhead rates:

|  | Machining | Customizing | Total |  |  |
| :--- | ---: | ---: | ---: | ---: | :---: |
|  | 1,000 | 9,000 | 10,000 |  |  |
| Estimated total machine-hours (MHs) | $\$ 4,800$ | $\$$ | 23,400 | $\$ 28,200$ |  |
| Estimated total fixed manufacturing overhead <br> cost | $\$$ | 1.10 | $\$$ | 2.50 |  |
| Estimated variable manufacturing overhead cost <br> per MH | $\$$ |  |  |  |  |

During the most recent month, the company started and completed two jobs - Job A and Job J. There were no beginning inventories. Data concerning those two jobs follow:

|  | Job A | Job J |  |
| :--- | ---: | ---: | ---: |
| Direct materials | $\$$ | 12,000 | $\$$ |
| 7,700 |  |  |  |
| Direct labor cost | $\$ 20,700$ | $\$$ | 6,400 |
| Machining machine-hours | 700 | 300 |  |
| Customizing machine-hours |  | 3,600 | 5,400 |

Assume that the company uses departmental predetermined overhead rates with machine-hours as the allocation base in both production departments. Further assume that the company uses a markup of $50 \%$ on manufacturing cost to establish selling prices. The calculated selling price for Job A is closest to:
\$27,595
\$87,752
\$82,785
\$55,190

Janicki Corporation has two manufacturing departments - Machining and Customizing. The company used the following data at the beginning of the year to calculate predetermined overhead rates:

|  | Machining | Customizing | Total |  |  |
| :--- | ---: | ---: | ---: | ---: | :---: |
|  | 1,000 | 9,000 | 10,000 |  |  |
| Estimated total machine-hours (MHs) | $\$$ | 4,800 | $\$$ | 23,400 | $\$ 28,200$ |
| Estimated total fixed manufacturing overhead <br> cost | $\$$ | 1.10 | $\$$ | 2.50 |  |
| Estimated variable manufacturing overhead cost <br> per MH |  |  |  |  |  |

During the most recent month, the company started and completed two jobs - Job A and Job J. There were no beginning inventories. Data concerning those two jobs follow:

|  | Job A | Job J |  |
| :--- | ---: | ---: | ---: |
| Direct materials | $\$$ | 12,000 | $\$$ |

Assume that the company uses departmental predetermined overhead rates with machine-hours as the allocation base in both production departments. Further assume that the company uses a markup of $50 \%$ on manufacturing cost to establish selling prices. The calculated selling price for Job J is closest to:
\$65,115
\$67,720
\$21,705
\$43,410

Comans Corporation has two production departments, Milling and Customizing. The company uses a job-order costing system and computes a predetermined overhead rate in each production department. The Milling Department's predetermined overhead rate is based on machine-hours and the Customizing Department's predetermined overhead rate is based on direct labor-hours. At the beginning of the current year, the company had made the following estimates:

|  | Milling | Customizing |
| :--- | ---: | ---: |
| Machine-hours | 18,000 | 13,000 |
| Direct labor-hours | 4,000 | 7,000 |
| Total fixed manufacturing overhead cost | $\$ 113,400$ | $\$ 64,400$ |
| Variable manufacturing overhead per machine-hour | $\$$ | 1.60 |
| Variable manufacturing overhead per direct labor-hour |  |  |

During the current month the company started and finished Job A319. The following data were recorded for this job:

| Job A319: | Milling |  | Customizing |
| :--- | ---: | ---: | ---: |
| Machine-hours |  | 60 | 10 |
| Direct labor-hours |  | 20 | 60 |
| Direct materials | $\$$ | 655 | $\$ 05$ |
| Direct labor cost | $\$$ | 400 | $\$$ |

The amount of overhead applied in the Milling Department to Job A319 is closest to:
\$142,200.00
$\$ 552.00$
$\$ 96.00$
$\$ 474.00$

Comans Corporation has two production departments, Milling and Customizing. The company uses a job-order costing system and computes a predetermined overhead rate in each production department. The Milling Department's predetermined overhead rate is based on machine-hours and the Customizing Department's predetermined overhead rate is based on direct labor-hours. At the beginning of the current year, the company had made the following estimates:

|  | Milling | Customizing |
| :--- | ---: | ---: |
| Machine-hours | 18,000 | 13,000 |
| Direct labor-hours | 4,000 | 7,000 |
| Total fixed manufacturing overhead cost | $\$ 113,400$ | $\$ 64,400$ |
| Variable manufacturing overhead per machine-hour | $\$$ | 1.60 |
| Variable manufacturing overhead per direct labor-hour |  |  |

During the current month the company started and finished Job A319. The following data were recorded for this job:

| Job A319: | Milling |  | Customizing |
| :--- | ---: | ---: | ---: |
| Machine-hours |  | 60 | 10 |
| Direct labor-hours |  | 20 | 60 |
| Direct materials | $\$$ | 655 | $\$$ |
| Direct labor cost | $\$$ | 400 | $\$ 05$ |
|  |  |  | 1,200 |

The amount of overhead applied in the Customizing Department to Job A319 is closest to:
$\$ 234.00$
$\$ 786.00$
\$552.00
\$91,700.00

Comans Corporation has two production departments, Milling and Customizing. The company uses a job-order costing system and computes a predetermined overhead rate in each production department. The Milling Department's predetermined overhead rate is based on machine-hours and the Customizing Department's predetermined overhead rate is based on direct labor-hours. At the beginning of the current year, the company had made the following estimates:

|  | Milling | Customizing |
| :--- | ---: | ---: |
| Machine-hours | 18,000 | 13,000 |
| Direct labor-hours | 4,000 | 7,000 |
| Total fixed manufacturing overhead cost | $\$ 113,400$ | $\$ 64,400$ |
| Variable manufacturing overhead per machine-hour | $\$$ | 1.60 |
| Variable manufacturing overhead per direct labor-hour |  |  |

During the current month the company started and finished Job A319. The following data were recorded for this job:

| Job A319: | Milling |  | Customizing |
| :--- | ---: | ---: | ---: |
| Machine-hours |  | 60 | 10 |
| Direct labor-hours | $\$$ | 20 | 60 |
| Direct materials | $\$$ | 655 | $\$$ |
| Direct labor cost | $\$$ | 400 | $\$ 05$ |
|  |  |  | 1,200 |

If the company marks up its manufacturing costs by $20 \%$ then the selling price for Job A319 would be closest to:
\$5,042.00
\$4,584.00
\$3,820.00
$\$ 764.00$

Sanderlin Corporation has two manufacturing departments - Machining and Finishing. The company used the following data at the beginning of the year to calculate predetermined overhead rates:

|  | Machining | Finishing | Total |  |
| :--- | ---: | ---: | ---: | ---: |
|  | 5,000 | 5,000 | 10,000 |  |
| Estimated total machine-hours (MHs) | $\$ 26,500$ | $\$$ | 13,500 | $\$ 40,000$ |
| Estimated total fixed manufacturing overhead cost |  |  |  |  |
| Estimated variable manufacturing overhead cost |  | 2.00 | $\$$ | 3.00 |

During the most recent month, the company started and completed two jobs - Job C and Job L. There were no beginning inventories. Data concerning those two jobs follow:

|  | Job C | Job L |  |
| :--- | ---: | ---: | ---: |
| Direct materials | $\$$ | 12,500 | $\$ 8,200$ |
| Direct labor cost | $\$$ | 20,200 | $\$ 6,400$ |
| Machining machine-hours |  | 3,400 | 1,600 |
| Finishing machine-hours |  | 2,000 | 3,000 |

Assume that the company uses departmental predetermined overhead rates with machinehours as the allocation base in both production departments. The manufacturing overhead applied to Job L is closest to:
\$11,680
\$28,780
\$17,100
\$29,900

Sanderlin Corporation has two manufacturing departments - Machining and Finishing. The company used the following data at the beginning of the year to calculate predetermined overhead rates:

|  | Machining | Finishing | Total |  |
| :--- | ---: | ---: | ---: | ---: |
|  | 5,000 | 5,000 | 10,000 |  |
| Estimated total machine-hours (MHs) | $\$ 26,500$ | $\$$ | 13,500 | $\$ 40,000$ |
| Estimated total fixed manufacturing overhead cost | $\$$ |  |  |  |
| Estimated variable manufacturing overhead cost |  | 2.00 | $\$$ | 3.00 |

During the most recent month, the company started and completed two jobs - Job C and Job L. There were no beginning inventories. Data concerning those two jobs follow:

|  | Job C | Job L |  |
| :--- | ---: | ---: | ---: |
| Direct materials | $\$ 12,500$ | $\$ 8,200$ |  |
| Direct labor cost | $\$ 20,200$ | $\$ 6,400$ |  |
| Machining machine-hours |  | 3,400 | 1,600 |
| Finishing machine-hours |  | 2,000 | 3,000 |

Assume that the company uses departmental predetermined overhead rates with machine-hours as the allocation base in both production departments. Further assume that the company uses a markup of $20 \%$ on manufacturing cost to establish selling prices. The calculated selling price for Job C is closest to:
\$87,666
\$68,920
\$13,784
\$82,704

Collini Corporation has two production departments, Machining and Customizing. The company uses a job-order costing system and computes a predetermined overhead rate in each production department. The Machining Department's predetermined overhead rate is based on machine-hours and the Customizing Department's predetermined overhead rate is based on direct labor-hours. At the beginning of the current year, the company had made the following estimates:

|  | Machining | Customizing |
| :--- | ---: | ---: |
|  | 17,000 | 15,000 |
| Machine-hours | 3,000 | 6,000 |
| Direct labor-hours | $\$ 102,000$ | $\$ 61,200$ |
| Total fixed manufacturing overhead cost | $\$$ | 1.70 |
| Variable manufacturing overhead per machine-hour |  |  |
| Variable manufacturing overhead per direct labor-hour |  |  |

During the current month the company started and finished Job T268. The following data were recorded for this job:

| Job T268: | Machining |  | Customizing |
| :--- | ---: | ---: | ---: |
| Machine-hours |  | 80 | 30 |
| Direct labor-hours |  | 30 | 50 |
| Direct materials | $\$$ | 720 | $\$ 880$ |
| Direct labor cost | $\$$ | 900 | $\$$ |
|  |  |  | 1,500 |

The total amount of overhead applied in both departments to Job T268 is closest to: \$616
\$715
\$2,046
\$1,331

Collini Corporation has two production departments, Machining and Customizing. The company uses a job-order costing system and computes a predetermined overhead rate in each production department. The Machining Department's predetermined overhead rate is based on machine-hours and the Customizing Department's predetermined overhead rate is based on direct labor-hours. At the beginning of the current year, the company had made the following estimates:

|  | Machining | Customizing |
| :--- | ---: | ---: |
|  | 17,000 | 15,000 |
| Machine-hours | 3,000 | 6,000 |
| Direct labor-hours | $\$ 102,000$ | $\$ 61,200$ |
| Total fixed manufacturing overhead cost | $\$$ | 1.70 |
| Variable manufacturing overhead per machine-hour |  |  |
| Variable manufacturing overhead per direct labor-hour |  |  |

During the current month the company started and finished Job T268. The following data were recorded for this job:

| Job T268: | Machining |  | Customizing |
| :--- | ---: | ---: | ---: |
| Machine-hours |  | 80 | 30 |
| Direct labor-hours |  | 30 | 50 |
| Direct materials | $\$$ | 720 | $\$$ |
| Direct labor cost | $\$$ | 900 | $\$ 800$ |
|  |  |  | 1,500 |

The total job cost for Job T268 is closest to:
\$2,595
\$616
\$4,831
\$2,236

Collini Corporation has two production departments, Machining and Customizing. The company uses a job-order costing system and computes a predetermined overhead rate in each production department. The Machining Department's predetermined overhead rate is based on machine-hours and the Customizing Department's predetermined overhead rate is based on direct labor-hours. At the beginning of the current year, the company had made the following estimates:

|  | Machining | Customizing |  |
| :--- | ---: | ---: | ---: |
|  | 17,000 | 15,000 |  |
| Machine-hours | 3,000 |  | 6,000 |
| Direct labor-hours | $\$ 102,000$ | $\$$ | 61,200 |
| Total fixed manufacturing overhead cost | $\$ 1.70$ |  |  |
| Variable manufacturing overhead per machine-hour | $\$$ | $\$$ | 4.10 |

During the current month the company started and finished Job T268. The following data were recorded for this job:

| Job T268: | Machining |  | Customizing |
| :--- | ---: | ---: | ---: |
| Machine-hours |  | 80 | 30 |
| Direct labor-hours |  | 30 | 50 |
| Direct materials | $\$$ | 720 | $\$$ |
| Direct labor cost | $\$$ | 900 | $\$ 800$ |
|  |  |  | 1,500 |

If the company marks up its manufacturing costs by $40 \%$ then the selling price for Job T268 would be closest to:
\$1,932.40
\$6,763.40
\$4,831.00
\$7,440.00

Heroux Corporation has two manufacturing departments - Forming and Customizing. The company used the following data at the beginning of the year to calculate predetermined overhead rates:

|  | Forming | Customizing | Total |  |
| :--- | ---: | ---: | ---: | ---: |
|  | 3,000 | 7,000 | 10,000 |  |
| Estimated total machine-hours (MHs) |  |  |  |  |
| Estimated total fixed manufacturing overhead <br> cost | $\$ 16,500$ | $\$$ | 20,300 | $\$ 36,800$ |
| Estimated variable manufacturing overhead cost <br> per MH | $\$ 1.70$ | $\$$ | 2.50 |  |

During the most recent month, the company started and completed two jobs - Job A and Job H. There were no beginning inventories. Data concerning those two jobs follow:

|  | Job A | Job H |
| :--- | ---: | ---: |
| Direct materials | $\$$ | 12,800 |
| $\$ 6,700$ |  |  |
| Direct labor cost | $\$ 24,300$ | $\$ 7,800$ |
| Forming machine-hours | 2,000 | 1,000 |
| Customizing machine-hours | 2,800 | 4,200 |

Assume that the company uses a plantwide predetermined manufacturing overhead rate based on machine-hours. The amount of manufacturing overhead applied to Job A is closest to:

Heroux Corporation has two manufacturing departments - Forming and Customizing. The company used the following data at the beginning of the year to calculate predetermined overhead rates:

|  | Forming | Customizing | Total |  |
| :--- | ---: | ---: | ---: | ---: |
|  | 3,000 | 7,000 | 10,000 |  |
| Estimated total machine-hours (MHs) |  |  |  |  |
| Estimated total fixed manufacturing overhead <br> cost | $\$ 16,500$ | $\$$ | 20,300 | $\$ 36,800$ |
| Estimated variable manufacturing overhead cost <br> per MH | $\$ 1.70$ | $\$$ | 2.50 |  |

During the most recent month, the company started and completed two jobs - Job A and Job H. There were no beginning inventories. Data concerning those two jobs follow:

|  | Job A | Job H |
| :--- | ---: | ---: |
| Direct materials | $\$$ | 12,800 |
| $\$ 6,700$ |  |  |
| Direct labor cost | $\$ 24,300$ | $\$ 7,800$ |
| Forming machine-hours | 2,000 | 1,000 |
| Customizing machine-hours | 2,800 | 4,200 |

Assume that the company uses a plantwide predetermined manufacturing overhead rate based on machine-hours. The amount of manufacturing overhead applied to Job H is closest to:

Heroux Corporation has two manufacturing departments - Forming and Customizing. The company used the following data at the beginning of the year to calculate predetermined overhead rates:

|  | Forming | Customizing | Total |  |
| :--- | ---: | ---: | ---: | ---: |
|  | 3,000 | 7,000 | 10,000 |  |
| Estimated total machine-hours (MHs) |  |  |  |  |
| Estimated total fixed manufacturing overhead <br> cost | $\$ 16,500$ | $\$$ | 20,300 | $\$ 36,800$ |
| Estimated variable manufacturing overhead cost <br> per MH | $\$ 1.70$ | $\$$ | 2.50 |  |

During the most recent month, the company started and completed two jobs - Job A and Job H. There were no beginning inventories. Data concerning those two jobs follow:

|  | Job A | Job H |  |
| :--- | ---: | ---: | ---: |
| Direct materials | $\$$ | 12,800 | $\$ 6,700$ |
| Direct labor cost | $\$ 24,300$ | $\$ 7,800$ |  |
| Forming machine-hours | 2,000 | 1,000 |  |
| Customizing machine-hours | 2,800 | 4,200 |  |

Assume that the company uses departmental predetermined overhead rates with machinehours as the allocation base in both production departments. The manufacturing overhead applied to Job A is closest to:
\$14,400
\$15,120
\$28,512
\$29,520

Heroux Corporation has two manufacturing departments - Forming and Customizing. The company used the following data at the beginning of the year to calculate predetermined overhead rates:

|  | Forming | Customizing | Total |  |
| :--- | ---: | ---: | ---: | ---: |
|  | 3,000 | 7,000 | 10,000 |  |
| Estimated total machine-hours (MHs) |  |  |  |  |
| Estimated total fixed manufacturing overhead <br> cost | $\$ 16,500$ | $\$$ | 20,300 | $\$ 36,800$ |
| Estimated variable manufacturing overhead cost <br> per MH | $\$ 1.70$ | $\$$ | 2.50 |  |

During the most recent month, the company started and completed two jobs - Job A and Job H. There were no beginning inventories. Data concerning those two jobs follow:

|  | Job A | Job H |
| :--- | ---: | ---: |
| Direct materials | $\$$ | 12,800 |
| 6,700 |  |  |
| Direct labor cost | $\$ 24,300$ | $\$ 7,800$ |
| Forming machine-hours | 2,000 | 1,000 |
| Customizing machine-hours | 2,800 | 4,200 |

Assume that the company uses departmental predetermined overhead rates with machinehours as the allocation base in both production departments. The manufacturing overhead applied to Job H is closest to:
\$22,680
\$30,888
\$29,880
\$7,200

Tiff Corporation has two production departments, Casting and Assembly. The company uses a job-order costing system and computes a predetermined overhead rate in each production department. The Casting Department's predetermined overhead rate is based on machine-hours and the Assembly Department's predetermined overhead rate is based on direct labor-hours. At the beginning of the current year, the company had made the following estimates:

|  | Casting | Customizing |  |
| :--- | ---: | ---: | ---: |
|  | 17,000 | 10,000 |  |
| Machine-hours | 1,000 | 5,000 |  |
| Direct labor-hours | $\$ 129,200$ | $\$$ | 46,500 |
| Total fixed manufacturing overhead cost | $\$$ | 1.80 |  |
| Variable manufacturing overhead per machine-hour |  | $\$$ | 3.80 |
| Variable manufacturing overhead per direct labor-hour |  |  |  |

During the current month the company started and finished Job P131. The following data were recorded for this job:

| Job P131: | Machining |  | Customizing |
| :--- | ---: | ---: | ---: |
| Machine-hours | 90 | 20 |  |
| Direct labor-hours | 20 | 60 |  |

The predetermined overhead rate for the Casting Department is closest to:
$\$ 9.40$ per machine-hour
$\$ 7.60$ per machine-hour
$\$ 1.80$ per machine-hour
$\$ 31.96$ per machine-hour

Tiff Corporation has two production departments, Casting and Assembly. The company uses a job-order costing system and computes a predetermined overhead rate in each production department. The Casting Department's predetermined overhead rate is based on machine-hours and the Assembly Department's predetermined overhead rate is based on direct labor-hours. At the beginning of the current year, the company had made the following estimates:

|  | Casting | Customizing |
| :--- | ---: | ---: |
|  | 17,000 | 10,000 |
| Machine-hours | 1,000 | 5,000 |
| Direct labor-hours | $\$ 129,200$ | $\$ 46,500$ |
| Total fixed manufacturing overhead cost | $\$$ | 1.80 |
| Variable manufacturing overhead per machine-hour |  |  |
| Variable manufacturing overhead per direct labor-hour |  |  |

During the current month the company started and finished Job P131. The following data were recorded for this job:

| Job P131: | Machining |  | Customizing |
| :--- | ---: | ---: | ---: |
| Machine-hours | 90 | 20 |  |
| Direct labor-hours | 20 | 60 |  |

The amount of overhead applied in the Assembly Department to Job P131 is closest to:

Eisentrout Corporation has two production departments, Machining and Customizing. The company uses a job-order costing system and computes a predetermined overhead rate in each production department. The Machining Department's predetermined overhead rate is based on machine-hours and the Customizing Department's predetermined overhead rate is based on direct labor-hours. At the beginning of the current year, the company had made the following estimates:

|  | Machining | Customizing |  |
| :--- | ---: | ---: | ---: |
|  | 16,000 | 11,000 |  |
| Machine-hours | 2,000 | 6,000 |  |
| Direct labor-hours | $\$ 104,000$ | $\$$ | 56,400 |
| Total fixed manufacturing overhead cost | $\$ 8.10$ |  |  |
| Variable manufacturing overhead per machine-hour | $\$$ | $\$$ | 3.30 |

During the current month the company started and finished Job T272. The following data were recorded for this job:
Job T272:
Machine-hours
Machining Customizing
Direct labor-hours $10 \quad 60$30

The estimated total manufacturing overhead for the Machining Department is closest to:
\$137,600
\$104,000
\$33,600
\$310,933

Eisentrout Corporation has two production departments, Machining and Customizing. The company uses a job-order costing system and computes a predetermined overhead rate in each production department. The Machining Department's predetermined overhead rate is based on machine-hours and the Customizing Department's predetermined overhead rate is based on direct labor-hours. At the beginning of the current year, the company had made the following estimates:

|  | Machining | Customizing |
| :--- | ---: | ---: |
|  | 16,000 | 11,000 |
| Machine-hours | 2,000 | 6,000 |
| Direct labor-hours | $\$ 104,000$ | $\$ 56,400$ |
| Total fixed manufacturing overhead cost | $\$$ | 2.10 |
| Variable manufacturing overhead per machine-hour |  | $\$ 3.30$ |

During the current month the company started and finished Job T272. The following data were recorded for this job:

| Job T272: | Machining |  |
| :--- | ---: | ---: |
| Customizing |  |  |
| Machine-hours | 60 | 30 |
| Direct labor-hours | 10 | 60 |

The estimated total manufacturing overhead for the Customizing Department is closest to:
\$40,950
\$19,800
\$56,400
\$76,200

Eisentrout Corporation has two production departments, Machining and Customizing. The company uses a job-order costing system and computes a predetermined overhead rate in each production department. The Machining Department's predetermined overhead rate is based on machine-hours and the Customizing Department's predetermined overhead rate is based on direct labor-hours. At the beginning of the current year, the company had made the following estimates:

|  | Machining | Customizing |  |
| :--- | ---: | ---: | ---: |
| Machine-hours | 16,000 | 11,000 |  |
| Direct labor-hours | 2,000 | 6,000 |  |
| Total fixed manufacturing overhead cost | $\$ 104,000$ | $\$$ | 56,400 |
| Variable manufacturing overhead per machine-hour | $\$$ | 2.10 |  |
| Variable manufacturing overhead per direct labor-hour |  |  | $\$$ |
|  |  | 3.30 |  |
| During the current month the company started and finished Job T272. The following dat |  |  |  |
| were recorded for this job: |  |  |  |
|  |  |  |  |
| Job T272: | Machining |  | Customizing |
| Machine-hours | 60 | 30 |  |
| Direct labor-hours | 10 | 60 |  |

The predetermined overhead rate for the Machining Department is closest to:
$\$ 22.93$ per machine-hour
$\$ 6.50$ per machine-hour
$\$ 2.10$ per machine-hour
$\$ 8.60$ per machine-hour

Eisentrout Corporation has two production departments, Machining and Customizing. The company uses a job-order costing system and computes a predetermined overhead rate in each production department. The Machining Department's predetermined overhead rate is based on machine-hours and the Customizing Department's predetermined overhead rate is based on direct labor-hours. At the beginning of the current year, the company had made the following estimates:

|  | Machining | Customizing |  |
| :--- | ---: | ---: | ---: |
| Machine-hours | 16,000 | 11,000 |  |
| Direct labor-hours | 2,000 | 6,000 |  |
| Total fixed manufacturing overhead cost | $\$ 104,000$ | $\$$ | 56,400 |
| Variable manufacturing overhead per machine-hour | $\$$ | 2.10 |  |
| Variable manufacturing overhead per direct labor-hour |  |  | 3.30 |
|  |  | $\$$ |  |
| During the current month the company started and finished Job T272. The following data |  |  |  |
| were recorded for this job: |  |  |  |
|  |  |  |  |
| Job T272: | Machining |  | Customizing |
| Machine-hours | 60 | 30 |  |
| Direct labor-hours |  | 10 | 60 |

The predetermined overhead rate for the Customizing Department is closest to:
$\$ 3.30$ per direct labor-hour
$\$ 12.70$ per direct labor-hour
$\$ 9.40$ per direct labor-hour
$\$ 4.76$ per direct labor-hour

Eisentrout Corporation has two production departments, Machining and Customizing. The company uses a job-order costing system and computes a predetermined overhead rate in each production department. The Machining Department's predetermined overhead rate is based on machine-hours and the Customizing Department's predetermined overhead rate is based on direct labor-hours. At the beginning of the current year, the company had made the following estimates:

Machine-hours
Direct labor-hours
Total fixed manufacturing overhead cost
Variable manufacturing overhead per machine-hour
Variable manufacturing overhead per direct labor-hour

| Machining | Customizing |  |
| :---: | ---: | ---: |
| 16,000 | 11,000 |  |
| 2,000 | 6,000 |  |
| $\$ 104,000$ | $\$$ | 56,400 |
| $\$$ | 2.10 |  |
|  |  | $\$$ |
|  |  | 3.30 |

During the current month the company started and finished Job T272. The following data were recorded for this job:

| Job T272: | Machining |  | Customizing |
| :--- | ---: | ---: | ---: |
| Machine-hours |  | 60 | 30 |
| Direct labor-hours | 10 | 60 |  |

The amount of overhead applied in the Machining Department to Job T272 is closest to:
\$137,600.00
\$126.00
\$516.00
\$564.00

Eisentrout Corporation has two production departments, Machining and Customizing. The company uses a job-order costing system and computes a predetermined overhead rate in each production department. The Machining Department's predetermined overhead rate is based on machine-hours and the Customizing Department's predetermined overhead rate is based on direct labor-hours. At the beginning of the current year, the company had made the following estimates:

|  | Machining | Customizing |  |
| :--- | ---: | ---: | ---: |
| Machine-hours | 16,000 | 11,000 |  |
| Direct labor-hours | 2,000 | 6,000 |  |
| Total fixed manufacturing overhead cost | $\$ 104,000$ | $\$$ | 56,400 |
| Variable manufacturing overhead per machine-hour | $\$$ | 2.10 |  |
| Variable manufacturing overhead per direct labor-hour |  |  | $\$ 3.30$ |
|  |  |  |  |
| During the current month the company started and finished Job T272. The following dat |  |  |  |
| were recorded for this job: |  |  |  |
|  |  |  |  |
| Job T272: | Machining |  | Customizing |
| Machine-hours | 60 | 30 |  |
| Direct labor-hours | 10 | 60 |  |

The amount of overhead applied in the Customizing Department to Job T272 is closest to:
\$76,200.00
$\$ 762.00$
\$564.00
\$198.00

Stoke Corporation has two production departments, Forming and Assembly. The company uses a job-order costing system and computes a predetermined overhead rate in each production department. The Forming Department's predetermined overhead rate is based on machine-hours and the Assembly Department's predetermined overhead rate is based on direct labor-hours. At the beginning of the current year, the company had made the following estimates:

|  | Forming | Assembly |
| :--- | ---: | ---: |
| Machine-hours | 20,000 | 15,000 |
| Direct labor-hours | 2,000 | 7,000 |
| Total fixed manufacturing overhead cost | $\$ 138,000$ | $\$ 58,100$ |
| Variable manufacturing overhead per machine-hour | $\$$ | 2.30 |
| Variable manufacturing overhead per direct labor-hour |  |  |

During the current month the company started and finished Job A460. The following data were recorded for this job:

| Job A460: | Forming |  | Assembly |
| :--- | :---: | :---: | :---: |
| Machine-hours |  | 80 | 10 |
| Direct labor-hours | 30 | 50 |  |

The amount of overhead applied in the Forming Department to Job A460 is closest to:
$\$ 184,000.00$
\$184.00
$\$ 736.00$
\$664.00

Stoke Corporation has two production departments, Forming and Assembly. The company uses a job-order costing system and computes a predetermined overhead rate in each production department. The Forming Department's predetermined overhead rate is based on machine-hours and the Assembly Department's predetermined overhead rate is based on direct labor-hours. At the beginning of the current year, the company had made the following estimates:

|  | Forming | Assembly |
| :--- | ---: | ---: |
| Machine-hours | 20,000 | 15,000 |
| Direct labor-hours | 2,000 | 7,000 |
| Total fixed manufacturing overhead cost | $\$ 138,000$ | $\$ 58,100$ |
| Variable manufacturing overhead per machine-hour | $\$$ | 2.30 |
| Variable manufacturing overhead per direct labor-hour |  |  |

During the current month the company started and finished Job A460. The following data were recorded for this job:

| Job A460: | Forming |  | Assembly |
| :--- | :---: | :---: | :---: |
| Machine-hours |  | 80 | 10 |
| Direct labor-hours | 30 | 50 |  |

The amount of overhead applied in the Assembly Department to Job A460 is closest to:

Vanliere Corporation has two production departments, Machining and Finishing. The company uses a job-order costing system and computes a predetermined overhead rate in each production department. The Machining Department's predetermined overhead rate is based on machine-hours and the Finishing Department's predetermined overhead rate is based on direct labor-hours. At the beginning of the current year, the company had made the following estimates:

|  | Machining | Finishing |
| :--- | ---: | ---: |
|  | 19,000 | 11,000 |
| Machine-hours | 3,000 | 6,000 |
| Direct labor-hours | $\$ 138,700$ | $\$ 52,800$ |
| Total fixed manufacturing overhead cost | $\$$ | 1.90 |
| Variable manufacturing overhead per machine-hour |  | $\$$ |
| Variable manufacturing overhead per direct labor-hour |  |  |
|  |  |  |
|  |  |  |

During the current month the company started and finished Job A803. The following data were recorded for this job:

| Job A803: | Machining |  | Finishing |
| :--- | :---: | :---: | :---: |
| Machine-hours | 90 | 20 |  |
| Direct labor-hours | 20 | 60 |  |

The predetermined overhead rate for the Finishing Department is closest to:
$\$ 8.80$ per direct labor-hour
$\$ 3.98$ per direct labor-hour
$\$ 12.60$ per direct labor-hour
$\$ 3.80$ per direct labor-hour

Vanliere Corporation has two production departments, Machining and Finishing. The company uses a job-order costing system and computes a predetermined overhead rate in each production department. The Machining Department's predetermined overhead rate is based on machine-hours and the Finishing Department's predetermined overhead rate is based on direct labor-hours. At the beginning of the current year, the company had made the following estimates:

|  | Machining | Finishing |
| :--- | ---: | ---: |
| Machine-hours | 19,000 | 11,000 |
| Direct labor-hours | 3,000 | 6,000 |
| Total fixed manufacturing overhead cost | $\$ 138,700$ | $\$ 52,800$ |
| Variable manufacturing overhead per machine-hour | $\$$ | 1.90 |
| Variable manufacturing overhead per direct labor-hour |  |  |
|  | $\$$ | 3.80 |

During the current month the company started and finished Job A803. The following data were recorded for this job:

| Job A803: | Machining |  | Finishing |
| :--- | :---: | :---: | :---: |
| Machine-hours | 90 | 20 |  |
| Direct labor-hours | 20 | 60 |  |

The amount of overhead applied in the Machining Department to Job A803 is closest to:
$\$ 828.00$
$\$ 792.00$
\$171.00
\$174,800.00

Ahlheim Corporation has two production departments, Forming and Assembly. The company uses a job-order costing system and computes a predetermined overhead rate in each production department. The Forming Department's predetermined overhead rate is based on machine-hours and the Assembly Department's predetermined overhead rate is based on direct labor-hours. At the beginning of the current year, the company had made the following estimates:

|  | Forming | Assembly |
| :--- | ---: | ---: |
| Machine-hours | 16,000 | 15,000 |
| Direct labor-hours | 2,000 | 6,000 |
| Total fixed manufacturing overhead cost | $\$ 102,400$ | $\$ 55,200$ |
| Variable manufacturing overhead per machine-hour | $\$$ | 2.30 |
| Variable manufacturing overhead per direct labor-hour |  |  |
|  | $\$$ | 4.50 |

During the current month the company started and finished Job T924. The following data were recorded for this job:

| Job T924: | Forming |  | Assembl ${ }^{\prime}$ |  |
| :--- | ---: | ---: | ---: | ---: |
| Machine-hours |  | 70 |  | 20 |
| Direct labor-hours |  | 30 |  | 40 |
| Direct materials | $\$$ | 870 | $\$$ | 385 |
| Direct labor cost | $\$$ | 630 | $\$$ | 840 |

The estimated total manufacturing overhead for the Forming Department is closest to:
\$36,800
\$102,400
\$309,867
\$139,200

Ahlheim Corporation has two production departments, Forming and Assembly. The company uses a job-order costing system and computes a predetermined overhead rate in each production department. The Forming Department's predetermined overhead rate is based on machine-hours and the Assembly Department's predetermined overhead rate is based on direct labor-hours. At the beginning of the current year, the company had made the following estimates:

|  | Forming | Assembly |
| :--- | ---: | ---: |
| Machine-hours | 16,000 | 15,000 |
| Direct labor-hours | 2,000 | 6,000 |
| Total fixed manufacturing overhead cost | $\$ 102,400$ | $\$ 55,200$ |
| Variable manufacturing overhead per machine-hour | $\$$ | 2.30 |
| Variable manufacturing overhead per direct labor-hour |  |  |
|  | $\$$ | 4.50 |

During the current month the company started and finished Job T924. The following data were recorded for this job:

| Job T924: | Forming |  | Assembl ${ }^{\prime}$ |  |
| :--- | ---: | ---: | ---: | ---: |
| Machine-hours |  | 70 |  | 20 |
| Direct labor-hours |  | 30 |  | 40 |
| Direct materials | $\$$ | 870 | $\$$ | 385 |
| Direct labor cost | $\$$ | 630 | $\$$ | 840 |

The estimated total manufacturing overhead for the Assembly Department is closest to: \$27,000
\$55,200
\$82,200
\$47,700

Ahlheim Corporation has two production departments, Forming and Assembly. The company uses a job-order costing system and computes a predetermined overhead rate in each production department. The Forming Department's predetermined overhead rate is based on machine-hours and the Assembly Department's predetermined overhead rate is based on direct labor-hours. At the beginning of the current year, the company had made the following estimates:

|  | Forming | Assembly |
| :--- | ---: | ---: |
| Machine-hours | 16,000 | 15,000 |
| Direct labor-hours | 2,000 | 6,000 |
| Total fixed manufacturing overhead cost | $\$ 102,400$ | $\$ 55,200$ |
| Variable manufacturing overhead per machine-hour | $\$$ | 2.30 |
| Variable manufacturing overhead per direct labor-hour |  |  |
|  | $\$$ | 4.50 |

During the current month the company started and finished Job T924. The following data were recorded for this job:

| Job T924: | Forming |  | Assembl $\boldsymbol{r}$ |  |
| :--- | ---: | ---: | ---: | ---: |
| Machine-hours |  | 70 |  | 20 |
| Direct labor-hours |  | 30 |  | 40 |
| Direct materials | $\$$ | 870 | $\$$ | 385 |
| Direct labor cost | $\$$ | 630 | $\$$ | 840 |

The total amount of overhead applied in both departments to Job T924 is closest to:
\$1,157
\$548
\$609
\$1,705

Merati Corporation has two manufacturing departments-Forming and Assembly. The company used the following data at the beginning of the year to calculate predetermined overhead rates:

|  | Forming | Assembly | Total |  |
| :--- | ---: | ---: | ---: | ---: |
|  | 5,000 | 5,000 | 10,000 |  |
| Estimated total machine-hours (MHs) |  |  |  |  |
| Estimated total fixed manufacturing overhead cost | $\$$ | 28,000 | $\$$ | 10,500 | | $\$ 38,500$ |
| :--- |
| Estimated variable manufacturing overhead cost |
| per MH |

During the most recent month, the company started and completed two jobs - Job B and Job L. There were no beginning inventories. Data concerning those two jobs follow:

|  | Job A | Job L |
| :--- | :---: | :---: |
| Forming machine-hours | 3,400 | 1,600 |
| Assembly machine-hours | 2,000 | 3,000 |

Assume that the company uses departmental predetermined overhead rates with machine-hours as the allocation base in both departments. The departmental predetermined overhead rate in the Forming Department is closest to:
$\$ 5.60$
$\$ 7.40$
$\$ 1.80$
$\$ 6.05$

Merati Corporation has two manufacturing departments-Forming and Assembly. The company used the following data at the beginning of the year to calculate predetermined overhead rates:

|  | Forming |  | Assembly | Total |
| :--- | ---: | ---: | ---: | ---: |
|  | 5,000 | 5,000 | 10,000 |  |
| Estimated total machine-hours (MHs) |  |  |  |  |
| Estimated total fixed manufacturing overhead cost | $\$ 28,000$ | $\$$ | 10,500 | $\$ 38,500$ |
| Estimated variable manufacturing overhead cost |  |  |  |  |
| per MH | $\$$ | 1.80 | $\$$ | 2.60 |

During the most recent month, the company started and completed two jobs - Job B and Job L. There were no beginning inventories. Data concerning those two jobs follow:

|  | Job A | Job L |
| :--- | :---: | :---: |
| Forming machine-hours | 3,400 | 1,600 |
| Assembly machine-hours | 2,000 | 3,000 |

Assume that the company uses departmental predetermined overhead rates with machine-hours as the allocation base in both departments. The departmental predetermined overhead rate in the Assembly Department is closest to:
\$2.60
\$4.70
\$6.05
\$2.10

Merati Corporation has two manufacturing departments-Forming and Assembly. The company used the following data at the beginning of the year to calculate predetermined overhead rates:

|  | Forming | Assembly | Total |  |
| :--- | ---: | ---: | ---: | ---: |
|  | 5,000 | 5,000 | 10,000 |  |
| Estimated total machine-hours (MHs) |  |  |  |  |
| Estimated total fixed manufacturing overhead cost | $\$ 28,000$ | $\$$ | 10,500 | $\$ 38,500$ |
| Estimated variable manufacturing overhead cost |  |  |  |  |
| per MH | $\$$ | 1.80 | $\$$ | 2.60 |

During the most recent month, the company started and completed two jobs - Job B and Job L. There were no beginning inventories. Data concerning those two jobs follow:

|  | Job A | Job L |
| :--- | :---: | :---: |
| Forming machine-hours | 3,400 | 1,600 |
| Assembly machine-hours | 2,000 | 3,000 |

Assume that the company uses departmental predetermined overhead rates with machinehours as the allocation base in both production departments. The manufacturing overhead applied to Job B is closest to:
\$9,400
\$25,160
\$32,670
\$34,560

Merati Corporation has two manufacturing departments-Forming and Assembly. The company used the following data at the beginning of the year to calculate predetermined overhead rates:

|  | Forming | Assembly | Total |  |
| :--- | ---: | ---: | ---: | ---: |
|  | 5,000 | 5,000 | 10,000 |  |
| Estimated total machine-hours (MHs) |  |  |  |  |
| Estimated total fixed manufacturing overhead cost | $\$$ | 28,000 | $\$$ | 10,500 | $\mathbf{\$ 3 8 , 5 0 0}$| Estimated variable manufacturing overhead cost |
| :--- |
| per MH |

During the most recent month, the company started and completed two jobs - Job B and Job L. There were no beginning inventories. Data concerning those two jobs follow:

|  | Job A | Job L |
| :--- | :---: | :---: |
| Forming machine-hours | 3,400 | 1,600 |
| Assembly machine-hours | 2,000 | 3,000 |

Assume that the company uses departmental predetermined overhead rates with machinehours as the allocation base in both production departments. The manufacturing overhead applied to Job L is closest to:
\$27,830
\$11,840
\$25,940
\$14,100

Barbeau Corporation has two production departments, Milling and Customizing. The company uses a job-order costing system and computes a predetermined overhead rate in each production department. The Milling Department's predetermined overhead rate is based on machine-hours and the Customizing Department's predetermined overhead rate is based on direct labor-hours. At the beginning of the current year, the company had made the following estimates:

|  | Milling | Customizing |  |
| :--- | ---: | ---: | ---: |
|  | 17,000 | 13,000 |  |
| Machine-hours | 2,000 | 5,000 |  |
| Direct labor-hours | $\$ 11,000$ | $\$ 42,000$ |  |
| Total fixed manufacturing overhead cost | $\$$ | 1.60 |  |
| Variable manufacturing overhead per machine-hour |  | $\$$ | 4.30 |

During the current month the company started and finished Job A492. The following data were recorded for this job:

| Job A492: | Milling |  | Customizing |
| :--- | ---: | ---: | ---: |
| Machine-hours |  | 90 | 20 |
| Direct labor-hours | 20 | 50 |  |

The estimated total manufacturing overhead for the Customizing Department is closest to:
\$63,500
\$21,500
\$42,000
\$33,853

Barbeau Corporation has two production departments, Milling and Customizing. The company uses a job-order costing system and computes a predetermined overhead rate in each production department. The Milling Department's predetermined overhead rate is based on machine-hours and the Customizing Department's predetermined overhead rate is based on direct labor-hours. At the beginning of the current year, the company had made the following estimates:

|  | Milling | Customizing |  |
| :--- | ---: | ---: | ---: |
|  | 17,000 | 13,000 |  |
| Machine-hours | 2,000 | 5,000 |  |
| Direct labor-hours | $\$ 119,000$ | $\$$ | 42,000 |
| Total fixed manufacturing overhead cost | $\$ 1.60$ |  |  |
| Variable manufacturing overhead per machine-hour |  | $\$$ | 4.30 |

During the current month the company started and finished Job A492. The following data were recorded for this job:

| Job A492: | Milling |  | Customizing |
| :--- | ---: | ---: | ---: |
| Machine-hours |  | 90 | 20 |
| Direct labor-hours | 20 | 50 |  |

The amount of overhead applied in the Milling Department to Job A492 is closest to:
\$146,200.00
\$144.00
$\$ 756.00$
$\$ 774.00$

Kroeker Corporation has two production departments, Milling and Customizing. The company uses a job-order costing system and computes a predetermined overhead rate in each production department. The Milling Department's predetermined overhead rate is based on machine-hours and the Customizing Department's predetermined overhead rate is based on direct labor-hours. At the beginning of the current year, the company had made the following estimates:

|  | Milling | Customizing |  |
| :--- | ---: | ---: | ---: |
|  | 17,000 | 12,000 |  |
| Machine-hours | 1,000 | 9,000 |  |
| Direct labor-hours | $\$ 112,200$ | $\$$ | 81,000 |
| Total fixed manufacturing overhead cost | $\$$ | 1.70 |  |
| Variable manufacturing overhead per machine-hour |  | $\$$ | 4.30 |

During the current month the company started and finished Job T898. The following data were recorded for this job:

| Job T898: | Milling |  | Customizing |
| :--- | ---: | ---: | ---: |
| Machine-hours |  | 80 | 30 |
| Direct labor-hours | 20 | 50 |  |

The estimated total manufacturing overhead for the Milling Department is closest to:
\$240,833
\$141,100
\$28,900
\$112,200

Kroeker Corporation has two production departments, Milling and Customizing. The company uses a job-order costing system and computes a predetermined overhead rate in each production department. The Milling Department's predetermined overhead rate is based on machine-hours and the Customizing Department's predetermined overhead rate is based on direct labor-hours. At the beginning of the current year, the company had made the following estimates:

|  | Milling | Customizing |  |
| :--- | ---: | ---: | ---: |
|  | 17,000 | 12,000 |  |
| Machine-hours | 1,000 | 9,000 |  |
| Direct labor-hours | $\$ 12,200$ | $\$$ | 81,000 |
| Total fixed manufacturing overhead cost | $\$$ | 1.70 |  |
| Variable manufacturing overhead per machine-hour |  | $\$$ | 4.30 |

During the current month the company started and finished Job T898. The following data were recorded for this job:

| Job T898: | Milling |  | Customizing |
| :--- | ---: | ---: | ---: |
| Machine-hours |  | 80 | 30 |
| Direct labor-hours | 20 | 50 |  |

The amount of overhead applied in the Customizing Department to Job T898 is closest to:

$$
\$ 450.00
$$

$$
\$ 119,700.00
$$

\$665.00
\$215.00

Petty Corporation has two production departments, Milling and Finishing. The company uses a job-order costing system and computes a predetermined overhead rate in each production department. The Milling Department's predetermined overhead rate is based on machine-hours and the Finishing Department's predetermined overhead rate is based on direct labor-hours. At the beginning of the current year, the company had made the following estimates:

|  | Milling | Finishing |
| :--- | ---: | ---: |
|  | 20,000 | 14,000 |
| Machine-hours | 2,000 | 8,000 |
| Direct labor-hours | $\$ 148,000$ | $\$ 88,000$ |
| Total fixed manufacturing overhead cost | 1.90 |  |
| Variable manufacturing overhead per machine-hour | $\$$ | $\$$ |
| Variable manufacturing overhead per direct labor-hour |  |  |

The estimated total manufacturing overhead for the Milling Department is closest to:
\$408,000
\$38,000
\$148,000
\$186,000

Petty Corporation has two production departments, Milling and Finishing. The company uses a job-order costing system and computes a predetermined overhead rate in each production department. The Milling Department's predetermined overhead rate is based on machine-hours and the Finishing Department's predetermined overhead rate is based on direct labor-hours. At the beginning of the current year, the company had made the following estimates:

Machine-hours
Direct labor-hours
Total fixed manufacturing overhead cost
Variable manufacturing overhead per machine-hour
Variable manufacturing overhead per direct labor-hour

| Milling |  | Finishing |
| :--- | ---: | ---: |
|  | 20,000 | 14,000 |
|  | 2,000 | 8,000 |
| $\$$ | 148,000 | $\$ 88,000$ |
| $\$$ | 1.90 |  |
|  |  | $\$$ |

The predetermined overhead rate for the Finishing Department is closest to:
$\$ 5.84$ per direct labor-hour
$\$ 3.60$ per direct labor-hour
$\$ 11.00$ per direct labor-hour
$\$ 14.60$ per direct labor-hour
Garza Corporation has two production departments, Casting and Customizing. The company uses a job-order costing system and computes a predetermined overhead rate in each production department. The Casting Department's predetermined overhead rate is based on machine-hours and the Customizing Department's predetermined overhead rate is based on direct labor-hours. At the beginning of the current year, the company had made the following estimates:

|  | Casting | Customizing |  |
| :--- | ---: | ---: | ---: |
| Machine-hours | 20,000 | 13,000 |  |
| Direct labor-hours | 1,000 | 7,000 |  |
| Total fixed manufacturing overhead cost | $\$ 152,000$ | $\$$ | 68,600 |
| Variable manufacturing overhead per machine-hour | $\$$ | 2.10 |  |
| Variable manufacturing overhead per direct labor-hour |  | $\$$ | 4.30 |

The estimated total manufacturing overhead for the Customizing Department is closest to:
\$54,110
\$30,100
\$98,700
\$68,600

Garza Corporation has two production departments, Casting and Customizing. The company uses a job-order costing system and computes a predetermined overhead rate in each production department. The Casting Department's predetermined overhead rate is based on machine-hours and the Customizing Department's predetermined overhead rate is based on direct labor-hours. At the beginning of the current year, the company had made the following estimates:

|  | Casting | Customizing |
| :--- | ---: | ---: |
|  | 20,000 | 13,000 |
| Machine-hours | 1,000 | 7,000 |
| Direct labor-hours | $\$ 152,000$ | $\$ 68,600$ |
| Total fixed manufacturing overhead cost | $\$$ | 2.10 |
| Variable manufacturing overhead per machine-hour |  |  |
| Variable manufacturing overhead per direct labor-hour |  |  |

The predetermined overhead rate for the Casting Department is closest to:
$\$ 9.70$ per machine-hour
$\$ 7.60$ per machine-hour
$\$ 2.10$ per machine-hour
$\$ 27.71$ per machine-hour
Marciante Corporation has two production departments, Casting and Finishing. The company uses a job-order costing system and computes a predetermined overhead rate in each production department. The Casting Department's predetermined overhead rate is based on machine-hours and the Finishing Department's predetermined overhead rate is based on direct labor-hours. At the beginning of the current year, the company had made the following estimates:

|  | Casting | Finishing |
| :--- | ---: | ---: |
|  | 17,000 | 10,000 |
| Machine-hours | 2,000 | 5,000 |
| Direct labor-hours | $\$ 105,400$ | $\$ 52,000$ |
| Total fixed manufacturing overhead cost | $\$$ | 1.70 |
| Variable manufacturing overhead per machine-hour |  | $\$$ |
| Variable manufacturing overhead per direct labor-hour |  |  |
|  |  |  |

The estimated total manufacturing overhead for the Casting Department is closest to:
\$387,260
\$134,300
\$28,900
\$105,400

Marciante Corporation has two production departments, Casting and Finishing. The company uses a job-order costing system and computes a predetermined overhead rate in each production department. The Casting Department's predetermined overhead rate is based on machine-hours and the Finishing Department's predetermined overhead rate is based on direct labor-hours. At the beginning of the current year, the company had made the following estimates:

|  | Casting | Finishing |
| :--- | ---: | ---: |
|  | 17,000 | 10,000 |
| Machine-hours | 2,000 | 5,000 |
| Direct labor-hours | $\$ 105,400$ | $\$ 52,000$ |
| Total fixed manufacturing overhead cost | $\$$ | 1.70 |
| Variable manufacturing overhead per machine-hour |  |  |
| Variable manufacturing overhead per direct labor-hour |  |  |
|  |  |  |
|  |  |  |

The estimated total manufacturing overhead for the Finishing Department is closest to:
\$71,500
\$52,000
\$34,794
\$19,500
Jurica Corporation has two production departments, Forming and Customizing. The company uses a job-order costing system and computes a predetermined overhead rate in each production department. The Forming Department's predetermined overhead rate is based on machine-hours and the Customizing Department's predetermined overhead rate is based on direct labor-hours. At the beginning of the current year, the company had made the following estimates:

Machine-hours
Direct labor-hours
Total fixed manufacturing overhead cost
Variable manufacturing overhead per machine-hour
Variable manufacturing overhead per direct labor-hour

| Forming | Customizing |  |
| :---: | ---: | ---: |
| 19,000 | 15,000 |  |
| 4,000 | 6,000 |  |
| $\$ 100,700$ | $\$$ | 63,000 |
| $\$$ | 2.00 |  |
|  |  | $\$$ |

The predetermined overhead rate for the Forming Department is closest to:
$\$ 23.12$ per machine-hour
\$2.00 per machine-hour
$\$ 5.30$ per machine-hour
$\$ 7.30$ per machine-hour

Jurica Corporation has two production departments, Forming and Customizing. The company uses a job-order costing system and computes a predetermined overhead rate in each production department. The Forming Department's predetermined overhead rate is based on machine-hours and the Customizing Department's predetermined overhead rate is based on direct labor-hours. At the beginning of the current year, the company had made the following estimates:

|  | Forming | Customizing |  |
| :--- | ---: | ---: | ---: |
| Machine-hours | 19,000 | 15,000 |  |
| Direct labor-hours | 4,000 | 6,000 |  |
| Total fixed manufacturing overhead cost | $\$ 100,700$ | $\$$ | 63,000 |
| Variable manufacturing overhead per machine-hour | $\$$ | 2.00 |  |
| Variable manufacturing overhead per direct labor-hour |  |  | $\$$ |

The predetermined overhead rate for the Customizing Department is closest to:
$\$ 4.55$ per direct labor-hour
$\$ 3.90$ per direct labor-hour
$\$ 10.50$ per direct labor-hour
$\$ 14.40$ per direct labor-hour

Claybrooks Corporation has two manufacturing departments - Casting and Assembly. The company used the following data at the beginning of the year to calculate predetermined overhead rates:

|  | Casting |  | Assembly |  | Total |
| :--- | ---: | ---: | ---: | ---: | ---: |
|  |  | 3,000 | 2,000 | 5,000 |  |
|  |  |  |  |  |  |
| Estimated total machine-hours (MHs) |  |  |  |  |  |
| Estimated total fixed manufacturing overhead cost | $\$$ | 17,700 | $\$$ | 500 | $\$ 200$ |
| Estimated variable manufacturing overhead cost <br> per MH | $\$$ | 1.50 | $\$$ | 2.20 |  |

Assume that the company uses a plantwide predetermined manufacturing overhead rate based on machine-hours. That predetermined manufacturing overhead rate is closest to:
$\$ 4.70$
$\$ 7.40$
\$6.48
\$3.70

Claybrooks Corporation has two manufacturing departments - Casting and Assembly. The company used the following data at the beginning of the year to calculate predetermined overhead rates:

|  | Casting | Assembly | Total |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
|  |  | 3,000 | 2,000 | 5,000 |  |
| Estimated total machine-hours (MHs) |  |  |  |  |  |
| Estimated total fixed manufacturing overhead cost | $\$$ | 17,700 | $\$$ | 5,800 | $\$ 23,500$ |
| Estimated variable manufacturing overhead cost <br> per MH | $\$$ | 1.50 | $\$$ | 2.20 |  |

Assume that the company uses departmental predetermined overhead rates with machine-hours as the allocation base in both departments. The departmental predetermined overhead rate in the Casting Department is closest to:
\$1.50
$\$ 7.40$
$\$ 5.90$
\$6.48

Claybrooks Corporation has two manufacturing departments - Casting and Assembly. The company used the following data at the beginning of the year to calculate predetermined overhead rates:

|  | Casting |  | Assembly |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Estimated total machine-hours (MHs) |  | 3,000 |  | 2,000 | 5,000 |
| Estimated total fixed manufacturing overhead cost | \$ | 17,700 | \$ | 5,800 | \$ 23,500 |
| Estimated variable manufacturing overhead cost per MH | \$ | 1.50 | \$ | 2.20 |  |

Assume that the company uses departmental predetermined overhead rates with machine-hours as the allocation base in both departments. The departmental predetermined overhead rate in the Assembly Department is closest to:
\$2.90
\$6.48
\$5.10
\$2.20
Henkes Corporation bases its predetermined overhead rate on the estimated labor-hours for the upcoming year. At the beginning of the most recently completed year, the company estimated the labor-hours for the upcoming year at 66,000 labor-hours. The estimated variable manufacturing overhead was $\$ 8.41$ per labor-hour and the estimated total fixed manufacturing overhead was $\$ 1,533,180$. The actual labor-hours for the year turned out to be 68,400 laborhours.

## Required:

Compute the company's predetermined overhead rate for the recently completed year.

Mccaughan Corporation bases its predetermined overhead rate on the estimated labor-hours for the upcoming year. Data for the most recently completed year appear below:

Estimates made at the beginning of the year:

Estimated labor-hours
Estimated variable manufacturing overhead
Estimated total fixed manufacturing overhead
Actual labor-hours for the year

37,000
\$ 4.43 per labor-hour
\$ 705,220
32,100

## Required:

Compute the company's predetermined overhead rate for the recently completed year.

Moscone Corporation bases its predetermined overhead rate on the estimated labor-hours for the upcoming year. At the beginning of the most recently completed year, the company estimated the labor-hours for the upcoming year at 78,000 labor-hours. The estimated variable manufacturing overhead was $\$ 9.99$ per labor-hour and the estimated total fixed manufacturing overhead was $\$ 985,920$.

## Required:

Compute the company's predetermined overhead rate.
Lightner Corporation bases its predetermined overhead rate on the estimated machine-hours for the upcoming year. Data for the upcoming year appear below:

Estimated machine-hours
Estimated variable manufacturing overhead
Estimated total fixed manufacturing overhead

50,000
8.82 per labor-hour
$\begin{array}{lr}\$ & 8.82 \\ \$ & 1,077,000\end{array}$

## Required:

Compute the company's predetermined overhead rate.

Job 243 was recently completed. The following data have been recorded on its job cost sheet:

Direct materials
Direct labor-hours
Direct labor wage rate
Machine-hours
Number of units completed
\$ 48,870
450 labor-hours
\$ 13 per labor-hour
486 machine-hours
2,700 units

The company applies manufacturing overhead on the basis of machine-hours. The predetermined overhead rate is $\$ 11$ per machine-hour.

## Required:

Compute the unit product cost that would appear on the job cost sheet for this job.

Job 652 was recently completed. The following data have been recorded on its job cost sheet:

Direct materials
Direct labor-hours
Direct labor wage rate
Number of units completed
\$ 59,400
1,224 DLHs
\$ $\quad 15$ per DLH 3,600 units

The company applies manufacturing overhead on the basis of direct labor-hours. The predetermined overhead rate is $\$ 35$ per direct labor-hour.

## Required:

Compute the unit product cost that would appear on the job cost sheet for this job.

## Managerial Accounting, 16e (Garrison)

Appendix 2A Activity-Based Absorption Costing
Feauto Manufacturing Corporation has a traditional costing system in which it applies manufacturing overhead to its products using a predetermined overhead rate based on direct labor-hours (DLHs). The company has two products, I63E and E76I, about which it has provided the following data:

| Direct materials per unit | $\$$ | 19.90 | $\$$ |
| :--- | ---: | ---: | ---: |
| Direct labor per unit | $\$$ | 12.00 | $\$ 5$ |
| Direct labor-hours per unit |  | 0.80 | 2.50 |
| Annual production (units) |  | 30,000 | 10,000 |

The company's estimated total manufacturing overhead for the year is $\$ 2,063,250$ and the company's estimated total direct labor-hours for the year is 45,000 .

The company is considering using a form of activity-based costing to determine its unit product costs for external reports. Data for this proposed activity-based costing system appear below:

Estimated
Activities and Activity Measures
Assembling products (DLHs)
Preparing batches (batches) Product
support (product variations)
Overhead Cost
\$ 720,000
263,250
Total
1,080,000
\$ 2,063,250

|  | Expected Activity |  |  |  |  |  |
| :--- | ---: | ---: | ---: | :---: | :---: | :---: |
| DLHs | I63E |  |  |  | E76I | Total |
| Batches | 24,000 | 21,000 | 45,000 |  |  |  |
| Product variations | 1,080 | 675 | 1,755 |  |  |  |
|  | 2,115 | 1,485 | 3,600 |  |  |  |

The manufacturing overhead that would be applied to a unit of product I63E under the company's traditional costing system is closest to:
\$12.80
\$39.35
\$76.03
\$36.68

Feauto Manufacturing Corporation has a traditional costing system in which it applies manufacturing overhead to its products using a predetermined overhead rate based on direct labor-hours (DLHs). The company has two products, I63E and E76I, about which it has provided the following data:

|  | I63E |  | E76I |  |
| :--- | ---: | ---: | ---: | ---: |
| Direct materials per unit | $\$$ | 19.90 | $\$$ | 54.40 |
| Direct labor per unit | $\$$ | 12.00 | $\$$ | 31.50 |
| Direct labor-hours per unit |  | 0.80 |  | 2.10 |
| Annual production (units) |  | 30,000 |  | 10,000 |

The company's estimated total manufacturing overhead for the year is $\$ 2,063,250$ and the company's estimated total direct labor-hours for the year is 45,000 .

The company is considering using a form of activity-based costing to determine its unit product costs for external reports. Data for this proposed activity-based costing system appear below:

|  | Estimated |  |
| :--- | ---: | ---: |
| Activities and Activity Measures | Overhead Cost |  |
| Assembling products (DLHs) | $\$$720,000 <br> Preparing batches (batches) <br> Product support (product variations) <br> Total | 263,250 |
|  | $2,080,000$ |  |


|  | Expected Activity |  |  |  |  |  |
| :--- | ---: | ---: | ---: | :---: | :---: | :---: |
|  | I63E |  |  |  | F76I | Total |
| DLHs | 24,000 | 21,000 | 45,000 |  |  |  |
| Batches | 1,080 | 675 | 1,755 |  |  |  |
| Product variations | 2,115 | 1,485 | 3,600 |  |  |  |

The manufacturing overhead that would be applied to a unit of product E76I under the activitybased costing system is closest to:
\$88.28
\$96.29
\$184.57
\$10.13

Coudriet Manufacturing Corporation has a traditional costing system in which it applies manufacturing overhead to its products using a predetermined overhead rate based on direct labor-hours (DLHs). The company has two products, P93S and N40S, about which it has provided the following data:

|  | P93S |  | N40S |  |
| :--- | ---: | ---: | ---: | ---: |
| Direct materials per unit | $\$$ | 21.90 | $\$$ | 54.80 |
| Direct labor per unit | $\$$ | 8.80 | $\$$ | 13.20 |
| Direct labor-hours per unit |  | 0.80 |  | 1.20 |
| Annual production (units) |  | 35,000 |  | 15,000 |

The company's estimated total manufacturing overhead for the year is $\$ 2,172,580$ and the company's estimated total direct labor-hours for the year is 46,000 .

The company is considering using a variation of activity-based costing to determine its unit product costs for external reports. Data for this proposed activity-based costing system appear below:

Activities and Activity Measures
Direct labor support (DLHs)
Setting up machines (setups) Part
administration (part types)
Total
Estimated
Overhead Cost
\$ 552,000
419,980
1,200,600
2,172,580

|  | Expected Astivity |  |  |  |  |  |
| :--- | ---: | ---: | ---: | :---: | :---: | :---: |
|  | P93S |  |  |  | N40S | Total |
| DLHs | 28,000 | 18,000 | 46,000 |  |  |  |
| Setups | 2,162 | , 656 | $\cong, 818$ |  |  |  |
| Part types | 1,886 | $\therefore, 116$ | $<, 002$ |  |  |  |

The unit product cost of product P93S under the company's traditional costing system is closest to:
\$68.48
$\$ 63.26$
\$30.70
\$40.30

Coudriet Manufacturing Corporation has a traditional costing system in which it applies manufacturing overhead to its products using a predetermined overhead rate based on direct labor-hours (DLHs). The company has two products, P93S and N40S, about which it has provided the following data:

|  |  | P93S | N40S |
| :--- | ---: | ---: | ---: |
| Direct materials per unit | $\$$ | 21.90 | $\$$ |
| 54.80 |  |  |  |
| Direct labor per unit | $\$$ | 8.80 | $\$$ |
| Direct labor-hours per unit |  | 13.20 |  |
| Annual production (units) |  | 35,000 |  |

The company's estimated total manufacturing overhead for the year is $\$ 2,172,580$ and the company's estimated total direct labor-hours for the year is 46,000 .

The company is considering using a variation of activity-based costing to determine its unit product costs for external reports. Data for this proposed activity-based costing system appear below:
Activities and Activity Measures
Direct labor support (DLHs)
Setting up machines (setups) Part
administration (part types)
Total

Estimated
Activities and Activity Measures
Overhead Cost
Direct labor support (DLHs)
\$ 552,000
Setting up machines (setups) Part
419,980
administration (part types)
Total
1,200,600

|  | Expected A stivity |  |  |
| :---: | :---: | :---: | :---: |
|  | P93S | N40S | Total |
| DLHs | 28,000 | 18,000 | 4¢,000 |
| Setups | 2,162 | ,656 | ¿,818 |
| Part types | 1,886 | ,116 | <,002 |

The unit product cost of product N40S under the activity-based costing system is closest to:
$\$ 68.00$
\$68.86
\$124.68
\$136.86

Poma Manufacturing Corporation has a traditional costing system in which it applies manufacturing overhead to its products using a predetermined overhead rate based on direct labor-hours (DLHs). The company has two products, R78S and N32Y, about which it has provided the following data:

|  | R78S |  | N32Y |
| :--- | ---: | ---: | ---: |
| Direct materials per unit | $\$$ | 27.20 | $\$$ |
| 54.70 |  |  |  |
| Direct labor per unit | $\$$ | 8.80 | $\$$ |
| 22.00 |  |  |  |
| Direct labor-hours per unit |  | 0.4 |  |
| Annual production (units) |  | 35,000 |  |
| Anco | 10,000 |  |  |

The company's estimated total manufacturing overhead for the year is $\$ 1,427,040$ and the company's estimated total direct labor-hours for the year is 24,000 .

The company is considering using a variation of activity-based costing to determine its unit product costs for external reports. Data for this proposed activity-based costing system appear below:

|  | Estimated |  |
| :--- | :---: | :---: |
| Activities and Activity Measures | Overhead Cost |  |
| Assembling products (DLHs) | $\$$672,000 <br> Preparing batches (batches) |  |
| Product support (product variations) | 255,840 |  |
| Total | $-\$ 499,200$ |  |


|  | Expected Activity |  |  |
| :--- | ---: | ---: | ---: |
| DLHs | R78S | N32Y | Total |
| Batches | 14,000 | 10,000 | 24,000 |
| Product variations | 816 | 1,152 | 1,968 |
|  | 840 | 408 | 1,248 |

The unit product cost of product R78S under the company's traditional costing system is closest to:
\$36.00
\$59.83
\$47.20
\$59.78

Poma Manufacturing Corporation has a traditional costing system in which it applies manufacturing overhead to its products using a predetermined overhead rate based on direct labor-hours (DLHs). The company has two products, R78S and N32Y, about which it has provided the following data:

|  | R78S |  | N32Y |  |
| :--- | ---: | ---: | ---: | ---: |
| Direct materials per unit | $\$$ | 27.20 | $\$$ | 54.70 |
| Direct labor per unit | $\$$ | 8.80 | $\$$ | 22.00 |
| Direct labor-hours per unit | 0.4 |  | 1.0 |  |
| Annual production (units) |  | 35,000 |  | 10,000 |

The company's estimated total manufacturing overhead for the year is $\$ 1,427,040$ and the company's estimated total direct labor-hours for the year is 24,000 .

The company is considering using a variation of activity-based costing to determine its unit product costs for external reports. Data for this proposed activity-based costing system appear below:

|  | Estimated <br> Activities and Activity Measures |  |  |
| :--- | :---: | ---: | :---: |
| Overhead Cost |  |  |  |
| Assembling products (DLHs) | $\$$672,000 <br> Preparing batches (batches) | 255,840 |  |
| Product support (product variations) | 499,200 |  |  |
| Total | $\$ 1,427,040$ |  |  |


|  | Expected Activity |  |  |
| :--- | ---: | ---: | ---: |
|  | R78S | N32Y | Total |
| DLHs | 14,000 | 10,000 | 24,000 |
| Batches | 816 | 1,152 | 1,968 |
| Product variations | 840 | 408 | 1,248 |

The unit product cost of product N32Y under the activity-based costing system is closest to:
\$136.00
$\$ 76.70$
$\$ 59.30$
\$136.16

Adelberg Corporation makes two products: Product A and Product B. Annual production and sales are 500 units of Product A and 1,000 units of Product B. The company has traditionally used direct labor-hours as the basis for applying all manufacturing overhead to products. Product A requires 0.4 direct labor-hours per unit and Product B requires 0.2 direct labor-hours per unit. The total estimated overhead for next period is $\$ 68,756$.

The company is considering switching to an activity-based costing system for the purpose of computing unit product costs for external reports. The new activity-based costing system would have three overhead activity cost pools - Activity 1, Activity 2, and General Factory with estimated overhead costs and expected activity as follows:

|  |  | Expected Activity |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  | Estimated |  |  |  |  |
|  | Overhead |  |  |  |  |
| Activity Cost Pool | Costs | Product A Product B | Total |  |  |
| Activity 1 | $\$$ | 31,031 | 1,000 | 300 | 1,300 |
| Activity 2 | $\$$ | 22,249 | 1,600 | 300 | 1,900 |
| General Factory | $\underline{\$}$ | 15,476 | 200 | 200 | 400 |
| Total | $\underline{\$}$ | 68,756 |  |  |  |

(Note: The General Factory activity cost pool's costs are allocated on the basis of direct labor-hours.)

The predetermined overhead rate under the traditional costing system is closest to:

$$
\$ 11.71
$$

\$38.69
\$171.89
\$23.87

Adelberg Corporation makes two products: Product A and Product B. Annual production and sales are 500 units of Product A and 1,000 units of Product B. The company has traditionally used direct labor-hours as the basis for applying all manufacturing overhead to products. Product A requires 0.4 direct labor-hours per unit and Product B requires 0.2 direct labor-hours per unit. The total estimated overhead for next period is $\$ 68,756$.

The company is considering switching to an activity-based costing system for the purpose of computing unit product costs for external reports. The new activity-based costing system would have three overhead activity cost pools - Activity 1, Activity 2, and General Factory with estimated overhead costs and expected activity as follows:

|  |  | Expected Activity |  |  |
| :--- | :---: | :---: | :---: | :---: |
|  |  | Estimated |  |  |
| Overhead |  |  |  |  |
| Activity Cost Pool | Costs |  | Product A Product B | Total |
| Activity 1 | $\$$ | 31,031 | 1,000 | 300 |
| Activity 2 | $\$$ | 22,249 | 1,600 | 300 |
| General Factory | $\underline{\$}$ | 15,476 | 200 | 200 |
| Total | $\underline{\$}$ | 68,756 |  |  |

(Note: The General Factory activity cost pool's costs are allocated on the basis of direct labor-hours.)

The overhead cost per unit of Product B under the traditional costing system is closest to:
\$2.34
\$7.74
\$4.77
\$34.38

Adelberg Corporation makes two products: Product A and Product B. Annual production and sales are 500 units of Product A and 1,000 units of Product B. The company has traditionally used direct labor-hours as the basis for applying all manufacturing overhead to products. Product A requires 0.4 direct labor-hours per unit and Product B requires 0.2 direct labor-hours per unit. The total estimated overhead for next period is $\$ 68,756$.

The company is considering switching to an activity-based costing system for the purpose of computing unit product costs for external reports. The new activity-based costing system would have three overhead activity cost pools - Activity 1, Activity 2, and General Factory - with estimated overhead costs and expected activity as follows:

Expected Activity

|  |  | Expected Activity |  |  |  |
| :--- | :---: | ---: | ---: | ---: | ---: |
|  | Estimated |  |  |  |  |
| Activity Cost Pool | Overhead |  |  |  |  |
| Activity 1 | Costs | Product A Product B | Total |  |  |
| Activity 2 | $\$$ | 31,031 | 1,000 | 300 | 1,300 |
| General Factory | $\$$ | 22,249 | 1,600 | 300 | 1,900 |
| Total | $\$$ | 15,476 | 200 | 200 | 400 |
|  | $\underline{\$}$ | 68,756 |  |  |  |

(Note: The General Factory activity cost pool's costs are allocated on the basis of direct labor-hours.)

The predetermined overhead rate (i.e., activity rate) for Activity 2 under the activitybased costing system is closest to:
\$13.91
\$11.71
\$74.16
\$36.19

Adelberg Corporation makes two products: Product A and Product B. Annual production and sales are 500 units of Product A and 1,000 units of Product B. The company has traditionally used direct labor-hours as the basis for applying all manufacturing overhead to products. Product A requires 0.4 direct labor-hours per unit and Product B requires 0.2 direct labor-hours per unit. The total estimated overhead for next period is $\$ 68,756$.

The company is considering switching to an activity-based costing system for the purpose of computing unit product costs for external reports. The new activity-based costing system would have three overhead activity cost pools - Activity 1, Activity 2, and General Factory with estimated overhead costs and expected activity as follows:

|  |  |  | Expected Activity |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Estimated Overhead |  |  |  |  |
| Activity 1 | \$ | Costs | Product A 1,000 | Product B 300 | $\begin{gathered} \text { Total } \\ 1,300 \end{gathered}$ |
| Activity 2 | \$ | 22,249 | 1,600 | 300 | 1,900 |
| General Factory | \$ | 15,476 | 200 | 200 | 400 |
| Total | \$ | 68,756 |  |  |  |

(Note: The General Factory activity cost pool's costs are allocated on the basis of direct labor-hours.)

The overhead cost per unit of Product B under the activity-based costing system is closest to:
\$45.84
\$7.74
\$34.38
\$18.41

Njombe Corporation manufactures a variety of products. In the past, Njombe has been using a traditional costing system in which the predetermined overhead rate was $150 \%$ of direct labor cost. Selling prices had been set by multiplying total product cost by $200 \%$. Sensing that this system was distorting costs and selling prices, Njombe has decided to switch to an activity-based costing system for manufacturing overhead costs that uses the three activity cost pools listed below. Selling prices are still to be set at $200 \%$ of unit product cost under the new system. Information on these cost pools for next year are as follows:

Activity Cost Pool<br>Machine Setups<br>Quality Control<br>Other Overhead

Activity Measure<br>Number of setups<br>Number of inspections

| Estimated | Estimated Overhead |  |
| :---: | :---: | :---: |
| Activity |  | Cost |
| 400 | $\$$ | 150,000 |
| 1,500 | $\$$ | 180,000 |
| 30,000 | $\$$ | 480,000 |

Information (on a per unit basis) related to three popular products at Njombe are as follows:

|  | Model \#19 | Model \#36 | Model \#58 |  |
| :--- | :---: | ---: | ---: | ---: |
| Direct material cost | $\$ 400$ | $\$ 540$ | $\$ 310$ |  |
| Direct labor cost | $\$ 810$ | $\$ 600$ | $\$ 320$ |  |
| Number of setups | 2 |  | 3 |  |
| Number of inspections | 1 |  | 3 | 1 |
| Number of machine hours | 4 |  | 8 | 1 |
| N |  |  |  |  |

Under the traditional costing system, what would be the selling price of one unit of Model \#36? \$2,536
\$2,712
\$4,080
\$5,506

Njombe Corporation manufactures a variety of products. In the past, Njombe has been using a traditional costing system in which the predetermined overhead rate was $150 \%$ of direct labor cost. Selling prices had been set by multiplying total product cost by $200 \%$. Sensing that this system was distorting costs and selling prices, Njombe has decided to switch to an activity-based costing system for manufacturing overhead costs that uses the three activity cost pools listed below. Selling prices are still to be set at $200 \%$ of unit product cost under the new system. Information on these cost pools for next year are as follows:

|  |  | Estimated |  | Estimated Overhead |  |
| :--- | :--- | ---: | :--- | :---: | :---: |
| Activity Cost Pool | Activity Measure | Activity | Cost |  |  |
| Machine Setups | Number of setups | 400 | $\$$ | 150,000 |  |
| Quality Control | Number of inspections | 1,500 | $\$$ | 180,000 |  |
| Other Overhead | Machine hours | 30,000 | $\$$ | 480,000 |  |

Information (on a per unit basis) related to three popular products at Njombe are as follows:

|  | Model \#19 | Model \#36 | Model \#58 |  |
| :--- | :---: | :---: | :---: | ---: |
| Direct material cost | $\$ 400$ | $\$ 540$ | $\$ 310$ |  |
| Direct labor cost | $\$ 810$ | $\$ 600$ | $\$ 320$ |  |
| Number of setups | 2 |  | 3 |  |
| Number of inspections | 1 | 3 |  | 1 |
| Number of machine hours | 4 |  | 8 |  |

Under the activity-based costing system, what would be the selling price of one unit of Model \#36?
\$2,536
\$2,712
\$4,080
\$5,506

Njombe Corporation manufactures a variety of products. In the past, Njombe has been using a traditional costing system in which the predetermined overhead rate was $150 \%$ of direct labor cost. Selling prices had been set by multiplying total product cost by $200 \%$. Sensing that this system was distorting costs and selling prices, Njombe has decided to switch to an activity-based costing system for manufacturing overhead costs that uses the three activity cost pools listed below. Selling prices are still to be set at $200 \%$ of unit product cost under the new system. Information on these cost pools for next year are as follows:

Activity Cost Pool<br>Machine Setups<br>Quality Control<br>Other Overhead

Activity Measure<br>Number of setups<br>Number of inspections

| Estimated <br> Activity | Estimated Overhead |  |
| :---: | :---: | :---: |
| 400 | $\$$ | Cost |
| 1,500 | $\$$ | 180,000 |
| 30,000 | $\$$ | 480,000 |

Information (on a per unit basis) related to three popular products at Njombe are as follows:

|  | Model \#19 | Model \#36 | Model \#58 |  |
| :--- | :---: | :---: | :---: | ---: |
| Direct material cost | $\$ 400$ | $\$ 540$ | $\$ 310$ |  |
| Direct labor cost | $\$ 810$ | $\$ 600$ | $\$ 320$ |  |
| Number of setups | 2 |  | 3 |  |
| Number of inspections | 1 | 3 | 1 |  |
| Number of machine hours | 4 |  | 8 | 1 |
|  |  |  |  |  |

In comparing the traditional system with the activity-based costing system, which of Njombe's Models had higher unit product costs under the traditional system?
\#19
\#58
\#19 and \#58
\#36 and \#58

Look Manufacturing Corporation has a traditional costing system in which it applies manufacturing overhead to its products using a predetermined overhead rate based on direct labor-hours (DLHs). The company has two products, N06D and M09K, about which it has provided the following data:

|  | N06D |  | M09K |
| :--- | ---: | ---: | ---: |
| Direct materials per unit | $\$$ | 17.70 | $\$$ |

The company's estimated total manufacturing overhead for the year is $\$ 2,532,200$ and the company's estimated total direct labor-hours for the year is 44,000 .

The company is considering using a variation of activity-based costing to determine its unit product costs for external reports. Data for this proposed activity-based costing system appear below:

|  | Estimated |  |
| :--- | ---: | ---: |
| Activities and Activity Measures | Overhead Cost |  |
| Supporting direct labor (DLHs) | $\$ 880,000$ |  |
| Setting up machines (setups) | 376,200 |  |
| Parts administration (part types) | $1,276,000$ |  |
| Total | $2,532,200$ |  |


|  | Expected Activity |  |  |
| :--- | ---: | ---: | ---: |
| DLHs | N06D | M09K | Total |
| Setups | 20,000 | 24,000 | 44,000 |
| Part types | 1,408 | 1,100 | 2,508 |
|  | 1,540 | 1,012 | 2,552 |

The manufacturing overhead that would be applied to a unit of product N06D under the company's traditional costing system is closest to:
\$28.78
$\$ 10.00$
\$63.31
\$34.53

Look Manufacturing Corporation has a traditional costing system in which it applies manufacturing overhead to its products using a predetermined overhead rate based on direct labor-hours (DLHs). The company has two products, N06D and M09K, about which it has provided the following data:

| Direct materials per unit | $\$$ | 17.70 | $\$$ | 62.50 |
| :--- | ---: | ---: | ---: | ---: |
| Direct labor per unit | $\$$ | 5.00 | $\$$ | 16.00 |
| Direct labor-hours per unit |  | 0.50 |  | 1.60 |
| Annual production (units) |  | 40,000 |  | 15,000 |

The company's estimated total manufacturing overhead for the year is $\$ 2,532,200$ and the company's estimated total direct labor-hours for the year is 44,000 .

The company is considering using a variation of activity-based costing to determine its unit product costs for external reports. Data for this proposed activity-based costing system appear below:

|  | Estimated |
| :--- | :---: | ---: |
| Activities and Activity Measures | Overhead Cost |
| Supporting direct labor (DLHs) | $\$ \quad 880,000$ |
| Setting up machines (setups) | 376,200 |
| Parts administration (part types) | $1,276,000$ |
| Total | $\$$$2,532,200$ |


|  | Expected Activity |  |  |
| :--- | ---: | ---: | ---: |
| DLHs | N06D | M09K | Total |
| Setups | 20,000 | 24,000 | 44,000 |
| Part types | 1,408 | 1,100 | 2,508 |
|  | 1,540 | 1,012 | 2,552 |

The manufacturing overhead that would be applied to a unit of product M 09 K under the activitybased costing system is closest to:
\$76.73
\$92.08
\$11.00
\$168.81

Bullie Manufacturing Corporation has a traditional costing system in which it applies manufacturing overhead to its products using a predetermined overhead rate based on direct labor-hours (DLHs). The company has two products, D31X and U75X, about which it has provided the following data:

|  |  | D31X | U75X |
| :--- | ---: | ---: | ---: |
| Direct materials per unit | $\$$ | 29.20 | $\$$ |

The company's estimated total manufacturing overhead for the year is $\$ 1,147,650$ and the company's estimated total direct labor-hours for the year is 35,000 .

The company is considering using a variation of activity-based costing to determine its unit product costs for external reports. Data for this proposed activity-based costing system appear below:

| Activities and Activity Measures |  | Estimated Overhead Cost |  |
| :---: | :---: | :---: | :---: |
| Assembling products (DLHs) |  | \$ | ,000 |
| Preparing batches (batches) |  |  | 1,150 |
| Axial milling (MHs) |  |  | 6.500 |
| Total |  | \$ | 7.650 |
|  | D31X | U75X | Total |
| Assembling products | 3,500 | 31,500 | 35,000 |
| Preparing batches | 560 | 1,295 | 1,855 |
| Axial milling | 1,540 | 1,015 | 2,555 |

## Required:

a. Determine the manufacturing overhead cost per unit of each of the company's two products under the traditional costing system.
b. Determine the manufacturing overhead cost per unit of each of the company's two products under activity-based costing system.

Torri Manufacturing Corporation has a traditional costing system in which it applies manufacturing overhead to its products using a predetermined overhead rate based on direct labor-hours (DLHs). The company has two products, B40W and C63J, about which it has provided the following data:

|  |  | B40W | C63J |  |
| :--- | ---: | ---: | ---: | ---: |
| Direct materials per unit | $\$$ | 34.90 | $\$$ | 63.70 |
| Direct labor per unit | $\$$ | 20.80 | $\$$ | 62.40 |
| Direct labor-hours per unit |  | 0.80 |  | 2.40 |
| Annual production (units) |  | 35,000 |  | 15,000 |

The company's estimated total manufacturing overhead for the year is $\$ 2,656,000$ and the company's estimated total direct labor-hours for the year is 64,000 .

The company is considering using a variation of activity-based costing to determine its unit product costs for external reports. Data for this proposed activity-based costing system appear below:

| Activities and Activity Measures |  | Estimated Overhead Cost |  |
| :---: | :---: | :---: | :---: |
| Assembling products (DLHs) |  | \$ 1,216,000 |  |
| Preparing batches (batches) |  | 480,000 |  |
| Milling (MHs) |  | 960,000 |  |
| Total |  | \$ 2 | 6,000 |
| Activities | B40W | C63J | Total |
| Assembling products | 28,000 | 36,000 | 64,000 |
| Preparing batches | 2,304 | 2,496 | 4,800 |
| Milling | 1,088 | 2,112 | 3,200 |

## Required:

a. Determine the unit product cost of each of the company's two products under the traditional costing system.
b. Determine the unit product cost of each of the company's two products under activitybased costing system.

Cabigas Corporation manufactures two products, Product C and Product D. The company estimated it would incur $\$ 167,140$ in manufacturing overhead costs during the current period. Overhead currently is applied to the products on the basis of direct labor-hours. Data concerning the current period's operations appear below:

|  | Product C |  | Product D |
| :--- | :---: | ---: | :---: |
| Estimated volume | 2,000 | units | 2,700 units |
| Direct labor per unit | 2.00 | hours | 0.80 hour |
| Direct labor-hours per unit | $\$ 21.50$ |  | $\$$ |
| Annual production (units) | $\$ 24.10$ |  |  |
| A | 24.00 |  | $\$$ |

## Required:

a. Compute the predetermined overhead rate under the current method, and determine the unit product cost of each product for the current year.
b. The company is considering using an activity-based costing system to compute unit product costs for external financial reports instead of its traditional system based on direct labor-hours. The activity-based costing system would use three activity cost pools. Data relating to these activities for the current period are given below:

|  | Expected Activity |  |  |  |
| ---: | ---: | ---: | ---: | ---: |
| Estimated Overhead |  |  |  |  |
|  | Costs | Product C | Product D Total |  |
| $\$$ | 13,630 | 130 | 190 | 290 |
|  | 85,750 | 750 | 1,000 | 1,750 |
|  | 67,760 | 4,000 | 2,160 | 6,160 |
| $\$$ | 167,140 |  |  |  |

Determine the unit product cost of each product for the current period using the activity-based costing approach. General factory overhead is allocated based on direct labor-hours.

Welk Manufacturing Corporation has a traditional costing system in which it applies manufacturing overhead to its products using a predetermined overhead rate based on direct labor-hours (DLHs). The company has two products, H16Z and P25P, about which it has provided the following data:

|  |  | H16Z | P25P |  |
| :--- | ---: | ---: | ---: | ---: |
| Direct materials per unit | $\$$ | 10.20 | $\$$ | 50.50 |
| Direct labor per unit | $\$$ | 8.40 | $\$$ | 25.20 |
| Direct labor-hours per unit |  | 0.40 |  | 1.20 |
| Annual production (units) |  | 30,000 |  | 10,000 |

The company's estimated total manufacturing overhead for the year is $\$ 1,464,480$ and the company's estimated total direct labor-hours for the year is 24,000 .

The company is considering using a variation of activity-based costing to determine its unit product costs for external reports. Data for this proposed activity-based costing system appear below:

| Activities and Activity Measures |  | Estimated Overhead Cost |  |
| :---: | :---: | :---: | :---: |
| Supporting direct labor (DLHs) |  | \$ | 2,000 |
| Setting up machines (setups) |  | 132,480 |  |
| Parts administration (part types) |  | 780,000 |  |
| Total |  | \$ 1, | 4,480 |
|  | H16Z | P25P | Total |
| Supporting direct labor | 12,000 | 12,000 | 24,000 |
| Setting up machines | 864 | 240 | 1,104 |
| Parts administration | 600 | 960 | 1,560 |

## Required:

a. Determine the manufacturing overhead cost per unit of each of the company's two products under the traditional costing system.
b. Determine the manufacturing overhead cost per unit of each of the company's two products under activity-based costing system.

Werger Manufacturing Corporation has a traditional costing system in which it applies manufacturing overhead to its products using a predetermined overhead rate based on direct labor-hours (DLHs). The company has two products, W82R and L48S, about which it has provided the following data:

|  | W82R |  | L48S |
| :--- | :---: | :---: | :---: |
| Direct materials per unit | $\$$ | $11.50 \$$ | 62.90 |
| Direct labor per unit | $\$$ | $2.00 \$$ | 13.00 |
| Direct labor-hours per unit |  | 0.20 | 1.30 |
| Annual production (units) |  | 45,000 | 10,000 |

The company's estimated total manufacturing overhead for the year is $\$ 1,521,960$ and the company's estimated total direct labor-hours for the year is 22,000 .

The company is considering using a variation of activity-based costing to determine its unit product costs for external reports. Data for this proposed activity-based costing system appear below:

| Activities and Activity Measures |  | Estimated Overhead Cost |  |
| :---: | :---: | :---: | :---: |
| Supporting direct labor (DLHs) |  | \$ | 352,000 |
| Setting up machines (setups) |  |  | 201,960 |
| Parts administration (part types) |  |  | 968,000 |
| Total |  | \$ | 521,960 |
| Activities | W82R | L48S | Total |
| Supporting direct labor | 9,000 | 13,000 | 22,000 |
| Setting up machines | 814 | 374 | 1,188 |
| Parts administration | 924 | 1,012 | 1,936 |

## Required:

a. Determine the unit product cost of each of the company's two products under the traditional costing system.
b. Determine the unit product cost of each of the company's two products under activitybased costing system.

## Managerial Accounting, 16e (Garrison) <br> Appendix 2B The Predetermined Overhead Rate and Capacity

When the fixed costs of capacity are spread over the estimated activity of the period rather than the level of activity at capacity, the units that are produced must shoulder the costs of unused capacity.

When the predetermined overhead rate is based on the level of activity at capacity, an item called the Cost of Unused Capacity may appear to be treated as a period expense on income statements prepared for internal management use.

If the predetermined overhead rate is based on the estimated level of activity for the current period, then products will be charged only for the capacity that they use and will not be charged for the capacity they don't use.

Risser Woodworking Corporation produces fine cabinets. The company uses a job-order costing system in which its predetermined overhead rate is based on capacity. The capacity of the factory is determined by the capacity of its constraint, which is an automated jointer. Additional information is provided below for the most recent month:

Estimates at the beginning of the month:

Estimated total fixed manufacturing overhead
Capacity of the jointer
Actual results:

| Sales | $\$ 62,310$ |
| :--- | ---: |
| Direct materials | $\$ 14,100$ |
| Direct labor | $\$ 16,000$ |
| Actual total fixed manufacturing overhead | $\$ 14,256$ |
| Selling and administrative expense | $\$ 8,900$ |
| Actual hours of jointer use | 220 hours |

The gross margin that would be reported on the income statement prepared for internal management purposes would be closest to:
\$10,242
\$19,142
\$17,954
\$62,310
\$ 14,256

240 hours
\$ 62,310
\$ 14,100
\$ 16,000
\$ 14,256
\$ 8,900
220 hours

The management of Garn Corporation would like to investigate the possibility of basing its predetermined overhead rate on activity at capacity rather than on the estimated activity for the coming year. The Corporation's controller has provided an example to illustrate how this new system would work. In this example, the allocation base is machine-hours and the estimated activity for the upcoming year is 69,000 machine-hours. Capacity is 85,000 machine-hours. All of the manufacturing overhead is fixed and is $\$ 4,105,500$ per year within the range of 69,000 to 85,000 machine-hours. If the Corporation bases its predetermined overhead rate on capacity but the actual level of activity for the year turns out to be 69,700 machine-hours, the cost of unused capacity shown on the income statement prepared for internal management purposes would be closest to:
A) $\$ 772,800$
B) $\$ 780,640$
C) $\$ 738,990$
D) $\$ 41,650$

The management of Krach Corporation would like to investigate the possibility of basing its predetermined overhead rate on activity at capacity. The company's controller has provided an example to illustrate how this new system would work. In this example, the allocation base is machine-hours and the estimated amount of the allocation base for the upcoming year is 10,000 machine-hours. Capacity is 12,000 machine-hours and the actual level of activity for the year is assumed to be 9,500 machine-hours. All of the manufacturing overhead is fixed and both the estimated amount at the beginning of the year and the actual amount at the end of the year are assumed to be $\$ 12,000$ per year. For simplicity, it is assumed that this is the estimated manufacturing overhead for the year as well as the manufacturing overhead at capacity. It is further assumed that this is also the actual amount of manufacturing overhead for the year.

If the company bases its predetermined overhead rate on capacity, what would be the cost of unused capacity reported on the income statement prepared for internal management purposes?
\$2,000
\$2,500
\$1,900
\$600

The management of Winterroth Corporation would like to investigate the possibility of basing its predetermined overhead rate on activity at capacity. The Corporation's controller has provided an example to illustrate how this new system would work. In this example, the allocation base is machine-hours.

|  | Estimated at the Beginning of the Year | Capacity | Actual |
| :---: | :---: | :---: | :---: |
| Machine-hours | 53,000 | 63,000 | 49,000 |
| Manufacturing overhead | \$ 1,803,060 | \$ 1,803,060 | 1,803,060 |

If the Corporation bases its predetermined overhead rate on capacity, then as shown on the income statement prepared for internal management purposes, the cost of unused capacity would be closest to:
\$286,200
\$400,680
\$264,600
\$136,080

Dowty Woodworking Corporation produces fine cabinets. The company uses a job-order costing system in which its predetermined overhead rate is based on capacity. The capacity of the factory is determined by the capacity of its constraint, which is an automated lathe. Additional information is provided below for the most recent month:

Estimates at the beginning of the month:
Estimated total fixed manufacturing overhead
Capacity of the lathe
Actual results:
Actual total fixed manufacturing overhead
Actual hours of lathe use
\$ 19,964
280 hours
\$ 19,964
230 hours

The manufacturing overhead applied is closest to:
\$19,964
\$16,399
\$7,639
\$9,300

Rapier Woodworking Corporation produces fine cabinets. The company uses a job-order costing system in which its predetermined overhead rate is based on capacity. The capacity of the factory is determined by the capacity of its constraint, which is an automated jointer. Additional information is provided below for the most recent month:

Estimates at the beginning of the month:
Estimated total fixed manufacturing overhead
Capacity of the jointer
Actual results:
Actual total fixed manufacturing overhead
Actual hours of jointer use
\$ 3,740
200 hours
\$ 3,740
170 hours

The predetermined overhead rate based on hours at capacity is closest to:
$\$ 58.24$ per hour
$\$ 49.50$ per hour
$\$ 22.00$ per hour
$\$ 18.70$ per hour
Traeger Woodworking Corporation produces fine cabinets. The company uses a job-order costing system in which its predetermined overhead rate is based on capacity. The capacity of the factory is determined by the capacity of its constraint, which is an automated bandsaw.
Additional information is provided below for the most recent month:
Estimates at the beginning of the month:
Estimated total fixed manufacturing overhead \$ 26,936
Capacity of the bandsaw
280 hours
Actual results:
Actual total fixed manufacturing overhead \$ 26,936
Actual hours of bandsaw use
260 hours

The cost of unused capacity that would be reported as a period expense on the income statement prepared for internal management purposes would be closest to:
\$1,924
\$18,136
\$0
\$18,765

Mausser Woodworking Corporation produces fine cabinets. The company uses a job-order costing system in which its predetermined overhead rate is based on capacity. The capacity of the factory is determined by the capacity of its constraint, which is an automated jointer. Additional information is provided below for the most recent month:

Estimates at the beginning of the month:
Estimated total fixed manufacturing overhead
Capacity of the jointer
Actual results:

| Sales | $\$ 52,760$ |  |
| :--- | :---: | :---: |
| Direct materials | $\$ 13,300$ |  |
| Direct labor | $\$ 16,000$ |  |
| Actual total fixed manufacturing overhead | $\$ 11,648$ |  |
| Selling and administrative expense | $\$$ | 9,300 |
| Actual hours of jointer use |  | 260 hours |

The cost of unused capacity that would be reported as a period expense on the income statement prepared for internal management purposes would be closest to:
\$0
\$2,348
\$832
\$3,012
Mausser Woodworking Corporation produces fine cabinets. The company uses a job-order costing system in which its predetermined overhead rate is based on capacity. The capacity of the factory is determined by the capacity of its constraint, which is an automated jointer. Additional information is provided below for the most recent month:

Estimates at the beginning of the month:
Estimated total fixed manufacturing overhead
Capacity of the jointer
Actual results:

| Sales | $\$ 52,760$ |
| :--- | :--- |
| Direct materials | $\$ 13,300$ |
| Direct labor | $\$ 16,000$ |
| Actual total fixed manufacturing overhead | $\$ 11,648$ |
| Selling and administrative expense | $\$ 9,300$ |
| Actual hours of jointer use |  |

The gross margin that would be reported on the income statement prepared for internal management purposes would be closest to:
\$52,760
\$3,344
\$12,644
\$11,812

Coble Woodworking Corporation produces fine cabinets. The company uses a job-order costing system in which its predetermined overhead rate is based on capacity. The capacity of the factory is determined by the capacity of its constraint, which is an automated shaper. Additional information is provided below for the most recent month:

Estimates at the beginning of the month:
Estimated total fixed manufacturing overhead
Capacity of the shaper
\$ 33,075
Actual results:

| Sales | $\$ 79,268$ |
| :--- | :---: | :---: |
| Direct materials | $\$ 12,200$ |
| Direct labor | $\$ 17,400$ |
| Actual total fixed manufacturing overhead | $\$ 33,075$ |
| Selling and administrative expense | $\$ 8,100$ |
| Actual hours of shaper use | 250 hours |

The predetermined overhead rate based on hours at capacity is closest to:
$\$ 30.00$ per hour
$\$ 122.50$ per hour
$\$ 32.40$ per hour
$\$ 132.30$ per hour
Coble Woodworking Corporation produces fine cabinets. The company uses a job-order costing system in which its predetermined overhead rate is based on capacity. The capacity of the factory is determined by the capacity of its constraint, which is an automated shaper. Additional information is provided below for the most recent month:

Estimates at the beginning of the month:
Estimated total fixed manufacturing overhead
Capacity of the shaper
Actual results:

| Sales | $\$ 79,268$ |
| :--- | ---: |
| Direct materials | $\$ 12,200$ |
| Direct labor | $\$ 17,400$ |
| Actual total fixed manufacturing overhead | $\$ 33,075$ |
| Selling and administrative expense | $\$ 8,100$ |
| Actual hours of shaper use | 250 hours |

The manufacturing overhead applied is closest to:
\$7,500
\$33,075
\$8,100
\$30,625

Coble Woodworking Corporation produces fine cabinets. The company uses a job-order costing system in which its predetermined overhead rate is based on capacity. The capacity of the factory is determined by the capacity of its constraint, which is an automated shaper. Additional information is provided below for the most recent month:

Estimates at the beginning of the month:
Estimated total fixed manufacturing overhead
Capacity of the shaper
\$ 33,075
Actual results:

| Sales | $\$ 79,268$ |
| :--- | :--- | :---: |
| Direct materials | $\$ 12,200$ |
| Direct labor | $\$ 17,400$ |
| Actual total fixed manufacturing overhead | $\$ 33,075$ |
| Selling and administrative expense | $\$ 8,100$ |
| Actual hours of shaper use | 250 hours |

The cost of unused capacity that would be reported as a period expense on the income statement prepared for internal management purposes would be closest to:
\$2,450
\$0
\$24,975
\$25,575
Coble Woodworking Corporation produces fine cabinets. The company uses a job-order costing system in which its predetermined overhead rate is based on capacity. The capacity of the factory is determined by the capacity of its constraint, which is an automated shaper. Additional information is provided below for the most recent month:

Estimates at the beginning of the month:
Estimated total fixed manufacturing overhead
Capacity of the shaper
\$ 33,075
Actual results:
Sales \$ 79,268
Direct materials \$ 12,200
Direct labor
Actual total fixed manufacturing overhead
\$ 17,400

Selling and administrative expense
Actual hours of shaper use
\$ 33,075
\$ 8,100
250 hours

The gross margin that would be reported on the income statement prepared for internal management purposes would be closest to:
\$19,043
\$16,593
\$10,943
\$79,268

Dunnings Woodworking Corporation produces fine cabinets. The company uses a job-order costing system in which its predetermined overhead rate is based on capacity. The capacity of the factory is determined by the capacity of its constraint, which is an automated router. Additional information is provided below for the most recent month:

Estimates at the beginning of the month:
Estimated total fixed manufacturing overhead
\$ 10,998
Capacity of the router
180 hours
Actual results:
Actual total fixed manufacturing overhead
Actual hours of router use
\$ 10,998
130 hours

The predetermined overhead rate based on hours at capacity is closest to:
$\$ 84.60$ per hour
$\$ 61.10$ per hour
$\$ 61.54$ per hour
$\$ 44.44$ per hour
Dunnings Woodworking Corporation produces fine cabinets. The company uses a job-order costing system in which its predetermined overhead rate is based on capacity. The capacity of the factory is determined by the capacity of its constraint, which is an automated router. Additional information is provided below for the most recent month:

Estimates at the beginning of the month:
Estimated total fixed manufacturing overhead
Capacity of the router
Actual results:
Actual total fixed manufacturing overhead
Actual hours of router use
\$ 10,998
\$ 10,998
180 hours

130 hours

The manufacturing overhead applied is closest to:
\$7,943
\$8,000
\$5,778
\$10,998

The management of Bullinger Corporation would like to investigate the possibility of basing its predetermined overhead rate on activity at capacity. The company's controller has provided an example to illustrate how this new system would work. In this example, the allocation base is machine-hours and the estimated amount of the allocation base for the upcoming year is 9,000 machine-hours. Capacity is 12,000 machine-hours and the actual level of activity for the year is assumed to be 7,700 machine-hours. All of the manufacturing overhead is fixed and both the estimated amount at the beginning of the year and the actual amount at the end of the year are assumed to be $\$ 11,880$ per year. For simplicity, it is assumed that this is the estimated manufacturing overhead for the year as well as the manufacturing overhead at capacity. It is further assumed that this is also the actual amount of manufacturing overhead for the year.

If the company bases its predetermined overhead rate on the estimated amount of the allocation base for the upcoming year, then the predetermined overhead rate is closest to:
$\$ 1.32$ per machine-hour
$\$ 1.49$ per machine-hour
$\$ 0.99$ per machine-hour
$\$ 1.54$ per machine-hour
The management of Bullinger Corporation would like to investigate the possibility of basing its predetermined overhead rate on activity at capacity. The company's controller has provided an example to illustrate how this new system would work. In this example, the allocation base is machine-hours and the estimated amount of the allocation base for the upcoming year is 9,000 machine-hours. Capacity is 12,000 machine-hours and the actual level of activity for the year is assumed to be 7,700 machine-hours. All of the manufacturing overhead is fixed and both the estimated amount at the beginning of the year and the actual amount at the end of the year are assumed to be $\$ 11,880$ per year. For simplicity, it is assumed that this is the estimated manufacturing overhead for the year as well as the manufacturing overhead at capacity. It is further assumed that this is also the actual amount of manufacturing overhead for the year.

If the company bases its predetermined overhead rate on capacity, then the predetermined overhead rate is closest to:
$\$ 1.54$ per machine-hour
$\$ 1.32$ per machine-hour
$\$ 1.49$ per machine-hour
$\$ 0.99$ per machine-hour

The management of Bullinger Corporation would like to investigate the possibility of basing its predetermined overhead rate on activity at capacity. The company's controller has provided an example to illustrate how this new system would work. In this example, the allocation base is machine-hours and the estimated amount of the allocation base for the upcoming year is 9,000 machine-hours. Capacity is 12,000 machine-hours and the actual level of activity for the year is assumed to be 7,700 machine-hours. All of the manufacturing overhead is fixed and both the estimated amount at the beginning of the year and the actual amount at the end of the year are assumed to be $\$ 11,880$ per year. For simplicity, it is assumed that this is the estimated manufacturing overhead for the year as well as the manufacturing overhead at capacity. It is further assumed that this is also the actual amount of manufacturing overhead for the year.

If the company bases its predetermined overhead rate on capacity, what would be the cost of unused capacity reported on the income statement prepared for internal management purposes?
\$2,970
\$2,541
\$1,716
\$4,257
Zackery Woodworking Corporation produces fine cabinets. The company uses a job-order costing system in which its predetermined overhead rate is based on capacity. The capacity of the factory is determined by the capacity of its constraint, which is an automated lathe. Additional information is provided below for the most recent month:

Estimates at the beginning of the month:
Estimated total fixed manufacturing overhead
Capacity of the lathe
Actual results:
Actual total fixed manufacturing overhead
Actual hours of lathe use

## \$ 7,452

230 hours
\$ 7,452
180 hours

The manufacturing overhead applied is closest to:

$$
\$ 9,900
$$

\$5,832
\$7,748
\$7,452

Zackery Woodworking Corporation produces fine cabinets. The company uses a job-order costing system in which its predetermined overhead rate is based on capacity. The capacity of the factory is determined by the capacity of its constraint, which is an automated lathe. Additional information is provided below for the most recent month:

Estimates at the beginning of the month:
Estimated total fixed manufacturing overhead
Capacity of the lathe
Actual results:
Actual total fixed manufacturing overhead
Actual hours of lathe use
\$ 7,452
230 hours
\$ 7,452
180 hours

The cost of unused capacity that would be reported as a period expense on the income statement prepared for internal management purposes would be closest to:
\$2,448
\$296
\$0
\$1,620
The management of Holdaway Corporation would like to investigate the possibility of basing its predetermined overhead rate on activity at capacity. The company's controller has provided an example to illustrate how this new system would work. In this example, the allocation base is machine-hours and the estimated amount of the allocation base for the upcoming year is 79,000 machine-hours. Capacity is 88,000 machine-hours and the actual level of activity for the year is assumed to be 74,900 machine-hours. All of the manufacturing overhead is fixed and both the estimated amount at the beginning of the year and the actual amount at the end of the year are assumed to be $\$ 5,700,640$ per year. For simplicity, it is assumed that this is the estimated manufacturing overhead for the year as well as the manufacturing overhead at capacity. It is further assumed that this is also the actual amount of manufacturing overhead for the year.

If the company bases its predetermined overhead rate on capacity, then the predetermined overhead rate is closest to:
$\$ 72.16$ per machine-hour
$\$ 70.38$ per machine-hour
$\$ 76.11$ per machine-hour
$\$ 64.78$ per machine-hour

The management of Holdaway Corporation would like to investigate the possibility of basing its predetermined overhead rate on activity at capacity. The company's controller has provided an example to illustrate how this new system would work. In this example, the allocation base is machine-hours and the estimated amount of the allocation base for the upcoming year is 79,000 machine-hours. Capacity is 88,000 machine-hours and the actual level of activity for the year is assumed to be 74,900 machine-hours. All of the manufacturing overhead is fixed and both the estimated amount at the beginning of the year and the actual amount at the end of the year are assumed to be $\$ 5,700,640$ per year. For simplicity, it is assumed that this is the estimated manufacturing overhead for the year as well as the manufacturing overhead at capacity. It is further assumed that this is also the actual amount of manufacturing overhead for the year.

If the company bases its predetermined overhead rate on capacity, what would be the cost of unused capacity reported on the income statement prepared for internal management purposes?
\$295,856
\$848,618
\$583,020
\$552,762
The management of Featheringham Corporation would like to investigate the possibility of basing its predetermined overhead rate on activity at capacity. The company's controller has provided an example to illustrate how this new system would work. In this example, the allocation base is machine-hours and the estimated amount of the allocation base for the upcoming year is 62,000 machine-hours. Capacity is 75,000 machine-hours and the actual level of activity for the year is assumed to be 59,000 machine-hours. All of the manufacturing overhead is fixed and both the estimated amount at the beginning of the year and the actual amount at the end of the year are assumed to be $\$ 2,836,500$ per year. It is assumed that a number of jobs were worked on during the year, one of which was Job Z77W which required 410 machine-hours.

If the company bases its predetermined overhead rate on capacity, then the predetermined overhead rate is closest to:
$\$ 48.08$ per machine-hour
$\$ 37.82$ per machine-hour
$\$ 48.91$ per machine-hour
$\$ 45.75$ per machine-hour

The management of Featheringham Corporation would like to investigate the possibility of basing its predetermined overhead rate on activity at capacity. The company's controller has provided an example to illustrate how this new system would work. In this example, the allocation base is machine-hours and the estimated amount of the allocation base for the upcoming year is 62,000 machine-hours. Capacity is 75,000 machine-hours and the actual level of activity for the year is assumed to be 59,000 machine-hours. All of the manufacturing overhead is fixed and both the estimated amount at the beginning of the year and the actual amount at the end of the year are assumed to be $\$ 2,836,500$ per year. It is assumed that a number of jobs were worked on during the year, one of which was Job Z77W which required 410 machine-hours.

If the company bases its predetermined overhead rate on capacity, then the amount of manufacturing overhead charged to job Z77W is closest to:
\$15,506.20
\$19,065.00
\$20,051.12
\$19,711.27
The management of Featheringham Corporation would like to investigate the possibility of basing its predetermined overhead rate on activity at capacity. The company's controller has provided an example to illustrate how this new system would work. In this example, the allocation base is machine-hours and the estimated amount of the allocation base for the upcoming year is 62,000 machine-hours. Capacity is 75,000 machine-hours and the actual level of activity for the year is assumed to be 59,000 machine-hours. All of the manufacturing overhead is fixed and both the estimated amount at the beginning of the year and the actual amount at the end of the year are assumed to be $\$ 2,836,500$ per year. It is assumed that a number of jobs were worked on during the year, one of which was Job Z77W which required 410 machine-hours.

If the company bases its predetermined overhead rate on capacity, what would be the cost of unused capacity reported on the income statement prepared for internal management purposes?
\$137,250
\$605,120
\$491,660
\$467,870

The management of Plitt Corporation would like to investigate the possibility of basing its predetermined overhead rate on activity at capacity. The company's controller has provided an example to illustrate how this new system would work. In this example, the allocation base is machine-hours and the estimated amount of the allocation base for the upcoming year is 69,000 machine-hours. Capacity is 82,000 machine-hours and the actual level of activity for the year is assumed to be 72,400 machine-hours. All of the manufacturing overhead is fixed and both the estimated amount at the beginning of the year and the actual amount at the end of the year are assumed to be $\$ 4,130,340$ per year. It is assumed that a number of jobs were worked on during the year, one of which was Job Q20L which required 470 machine-hours.

If the company bases its predetermined overhead rate on the estimated amount of the allocation base for the upcoming year, then the predetermined overhead rate is closest to:
$\$ 57.05$ per machine-hour
$\$ 60.83$ per machine-hour
$\$ 59.86$ per machine-hour
$\$ 50.37$ per machine-hour
The management of Plitt Corporation would like to investigate the possibility of basing its predetermined overhead rate on activity at capacity. The company's controller has provided an example to illustrate how this new system would work. In this example, the allocation base is machine-hours and the estimated amount of the allocation base for the upcoming year is 69,000 machine-hours. Capacity is 82,000 machine-hours and the actual level of activity for the year is assumed to be 72,400 machine-hours. All of the manufacturing overhead is fixed and both the estimated amount at the beginning of the year and the actual amount at the end of the year are assumed to be $\$ 4,130,340$ per year. It is assumed that a number of jobs were worked on during the year, one of which was Job Q20L which required 470 machine-hours.

If the company bases its predetermined overhead rate on the estimated amount of the allocation base for the upcoming year, then the amount of manufacturing overhead charged to Job Q20L is closest to:
\$23,673.90
\$26,812.98
\$28,589.98
\$28,134.20

The management of Plitt Corporation would like to investigate the possibility of basing its predetermined overhead rate on activity at capacity. The company's controller has provided an example to illustrate how this new system would work. In this example, the allocation base is machine-hours and the estimated amount of the allocation base for the upcoming year is 69,000 machine-hours. Capacity is 82,000 machine-hours and the actual level of activity for the year is assumed to be 72,400 machine-hours. All of the manufacturing overhead is fixed and both the estimated amount at the beginning of the year and the actual amount at the end of the year are assumed to be $\$ 4,130,340$ per year. It is assumed that a number of jobs were worked on during the year, one of which was Job Q20L which required 470 machine-hours.

If the company bases its predetermined overhead rate on capacity, then the predetermined overhead rate is closest to:
$\$ 57.05$ per machine-hour
$\$ 59.86$ per machine-hour
$\$ 50.37$ per machine-hour
$\$ 60.83$ per machine-hour
The management of Plitt Corporation would like to investigate the possibility of basing its predetermined overhead rate on activity at capacity. The company's controller has provided an example to illustrate how this new system would work. In this example, the allocation base is machine-hours and the estimated amount of the allocation base for the upcoming year is 69,000 machine-hours. Capacity is 82,000 machine-hours and the actual level of activity for the year is assumed to be 72,400 machine-hours. All of the manufacturing overhead is fixed and both the estimated amount at the beginning of the year and the actual amount at the end of the year are assumed to be $\$ 4,130,340$ per year. It is assumed that a number of jobs were worked on during the year, one of which was Job Q20L which required 470 machine-hours.

If the company bases its predetermined overhead rate on capacity, then the amount of manufacturing overhead charged to Job Q20L is closest to:
\$28,589.98
\$26,592.60
\$26,812.98
\$23,673.90

The management of Plitt Corporation would like to investigate the possibility of basing its predetermined overhead rate on activity at capacity. The company's controller has provided an example to illustrate how this new system would work. In this example, the allocation base is machine-hours and the estimated amount of the allocation base for the upcoming year is 69,000 machine-hours. Capacity is 82,000 machine-hours and the actual level of activity for the year is assumed to be 72,400 machine-hours. All of the manufacturing overhead is fixed and both the estimated amount at the beginning of the year and the actual amount at the end of the year are assumed to be $\$ 4,130,340$ per year. It is assumed that a number of jobs were worked on during the year, one of which was Job Q20L which required 470 machine-hours.

If the company bases its predetermined overhead rate on capacity, what would be the cost of unused capacity reported on the income statement prepared for internal management purposes?
\$654,810
\$687,076
\$547,669
\$483,552
The management of Kotek Corporation would like to investigate the possibility of basing its predetermined overhead rate on activity at capacity rather than on the estimated amount of activity for the year. The company's controller has provided an example to illustrate how this new system would work. In this example, the allocation base is machine-hours and the estimated amount of the allocation base for the upcoming year is 8,000 machine-hours. In addition, capacity is 10,000 machine-hours and the actual activity for the year is 8,700 machine-hours. All of the manufacturing overhead is fixed and is $\$ 6,400$ per year. Job L77S, which required 220 machine-hours, is one of the jobs worked on during the year.

## Required:

a. Determine the predetermined overhead rate if the predetermined overhead rate is based on activity at capacity.
b. Determine how much overhead would be applied to Job L77S if the predetermined overhead rate is based on activity at capacity.
c. Determine the cost of unused capacity for the year if the predetermined overhead rate is based on activity at capacity.

The management of Schneiter Corporation would like to investigate the possibility of basing its predetermined overhead rate on activity at capacity rather than on the estimated amount of activity for the year. The company's controller has provided an example to illustrate how this new system would work. In this example, the allocation base is machine-hours and the estimated amount of the allocation base for the upcoming year is 42,000 machine-hours. In addition, capacity is 46,000 machine-hours and the actual activity for the year is 43,000 machine-hours. All of the manufacturing overhead is fixed and is $\$ 734,160$ per year.

## Required:

a. Determine the predetermined overhead rate if the predetermined overhead rate is based on activity at capacity.
b. Determine the cost of unused capacity for the year if the predetermined overhead rate is based on activity at capacity.

The management of Bouyer Corporation would like to investigate the possibility of basing its predetermined overhead rate on activity at capacity rather than on the estimated amount of activity for the year. The company's controller has provided an example to illustrate how this new system would work. In this example, the allocation base is machine-hours and the estimated amount of the allocation base for the upcoming year is 34,000 machine-hours. In addition, capacity is 37,000 machine-hours and the actual activity for the year is 34,700 machine-hours. All of the manufacturing overhead is fixed and is $\$ 377,400$ per year.

## Required:

Determine the cost of unused capacity for the year if the predetermined overhead rate is based on activity at capacity.

The management of Buelow Corporation would like to investigate the possibility of basing its predetermined overhead rate on activity at capacity rather than on the estimated amount of activity for the year. The company's controller has provided an example to illustrate how this new system would work.

Estimated activity for the upcoming year Capacity
Actual activity for the year Manufacturing overhead (all fixed)

76,000 machine-hours
94,000 machine-hours
82,800 machine-hours
\$ 5,572,320 per year

Job Q58A, which required 130 machine-hours, is one of the jobs worked on during the year.

## Required:

a. Determine the predetermined overhead rate if the predetermined overhead rate is based on the estimated activity for the upcoming year.
b. Determine how much overhead would be applied to Job Q58A if the predetermined overhead rate is based on estimated activity for the upcoming year.
c. Determine the predetermined overhead rate if the predetermined overhead rate is based on the activity at capacity.
d. Determine how much overhead would be applied to Job Q58A if the predetermined overhead rate is based on activity at capacity.
e. Determine the cost of unused capacity for the yearif the predetermined overhead rate is based on activity at capacity.

The management of Wrights Corporation would like to investigate the possibility of basing its predetermined overhead rate on activity at capacity rather than on the estimated amount of activity for the year. The company's controller has provided an example to illustrate how this new system would work.

| Estimated activity for the upcoming year | 15,000 machine-hours |
| :--- | ---: |
| Capacity | 18,000 machine-hours |
| Actual activity for the year | 15,800 machine-hours |
| Manufacturing overhead (all fixed) | $\$ 43,200$ per year |

## Required:

a. Determine the predetermined overhead rate if the predetermined overhead rate is based on the estimated activity for the upcoming year.
b. Determine the cost of unused capacity for the yearif the predetermined overhead rate is based on activity at capacity.

