# Test Bank for PFIN 6th Edition Billingsley Gitman Joehnk 

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## Chapter 02 Using Financial Statements and Budgets

## TRUEFALSE

1. The balance sheet shows an individual's financial condition as of the time the statement is prepared.
(A) True (B)

False
Answer: (A)
2. A budget is a financial report that forecasts an individual's current income as a percentage of his or her past earnings.
(A) True (B)

False
Answer: (B)
3. An income and expense statement provides a measure of financial performance over a period of time.
(A) True (B)

False
Answer: (A)
4. Financial planning is necessary only if an individual earns a lot of money.
(A) True
(B) False

Answer : (B)
5. The preparation of an income and expense statement is the first step in the personal financial planning process.
(A) True (B)

False
Answer : (B)
6. Knowing how to prepare and interpret personal financial statements is a cornerstone of personal financial planning.
(A) True (B)

False
Answer: (A)
7. Financial plans provide direction to annual budgets.
(A) True
(B) False

Answer: (A)
8. If an individual obtains a loan to purchase a car in June, this loan amount will be included as income for the month of June.
(A) True (B)

False
Answer: (B)
9. An individual's auto loan payments are listed as an expense on the income and expense statement.
(A) True
(B) False

Answer : (A)
10. If an individual lists his or her gross salary in the income portion of the budget, the expenditures section will include income taxes and social security taxes.
(A) True (B)

False
Answer : (A)
11. Net income (after taxes) should be used when preparing an income and expense statement.
(A) True
(B) False
12. It is best to prepare an individual's personal financial statements at least once a year, ideally when drawing up his or her budget.
(A) True (B)

False
Answer: (A)
13. It is recommended that an individual maintains a ledger to summarize all of his or her financial transactions.
(A) True (B)

False
Answer: (A)
14. An individual should prepare his or her personal financial statements once in five years.
(A) True
(B) False

Answer: (B)
15. An individual can maintain his or her personal financial statements using spreadsheet software.
(A) True
(B) False

Answer: (A)
16. An inability to reach short-term goals will significantly affect one's ability to reach long-term goals.
(A) True (B)

False
Answer : (A)
17. An individual is said to have a balanced budget when his or her total income for the year equals or exceeds his or her total expenditures for the year.
(A) True (B)

False
Answer : (A)
18. The best way to balance one's budget is to increase borrowing.
(A) True
(B) False

Answer: (B)
19. Budgeting and record keeping are the same.
(A) True
(B) False

Answer: (B)
20. Estimating expenses using actual expenses from previous years and tracking current expenses make the task of preparing a cash budget easier.
(A) True (B)

## False

Answer: (A)
21. A cash budget has value only if one uses it, reviews it regularly, and keeps careful records of income and expenses.
(A) True (B)

False
Answer: (A)
22. In a budget, "fun money" is for family members to spend as they like without having to account for how it is spent.
(A) True (B)

False
Answer: (A)
23. Future value calculations to estimate the funds needed to meet a goal take compounding into account.
(A) True (B)

False

Answer: (A)

## MULTICHOICE

24. A balance sheet describes a person's:
(A) financial position at a given point in time. (B)
financial performance over a period of time. (C)
financial performance at a given point in time. (D)
financial goals over a specific period of time. (E)
financial plans over a period of time.
Answer : (A)
25. Which of the following is true of an individual's income and expense statement?
(A) An individual's income and expense statement describes his or her financial position at a given point in time.
(B) An individual's income and expense statement measures his or her financial performance at a given point in time.
(C) An individual's income and expense statement describes his or her financial goals over a specific period of time.
(D) An individual's income and expense statement measures his or her financial performance over a period of time.
(E) An individual's income and expense statement describes his or her financial position over a period of time.

Answer: (D)
26. Which of the following is true of a budget?
(A) It shows the computation of the interest on a loan.
(B) It is a schedule of personal investments.
(C) It is a list of prepaid expenses.
(D) It is a detailed financial forecast.
(E) It is a set of personal financial objectives.

Answer : (D)
27. A budget helps in:
(A) setting financial goals.
(B) calculating discounted cash flows.
(C) giving feedback on the progress of the set plan.
(D) monitoring and controlling spending.
(E) revising depreciation schedules.

Answer : (D)
28. Which of the following is true of budgets?
(A) Budgets are meant for poor people only.
(B) Budgets need expensive software to be effective.
(C) Budgets are forward looking.
(D) Budgets are permanent.
(E) Budgets are unnecessary.

Answer: (C)
29. Annual budgets help in monitoring and controlling income, living expenses, purchases, and savings on:
(A) a weekly basis.
(B) a yearly basis.
(C) a quarterly basis.
(D) a semi-annually basis.
(E) a monthly basis.

Answer : (B)
30. Which of the following is true of budgets?
(A) Budgets are detailed forward looking financial reports based on expected income and expenses.
(B) Budgets describe a person's financial position at a given point in time.
(C) Budgets measure a person's financial performance at a given point in time.
(D) Budgets describe a person's financial goals over a specific period of time.
(E) Budgets are historical documents that tell an individual how he or she has performed in the past.

Answer : (A)
31. The three parts of an individual's balance sheet are his or her:
(A) income, liabilities, and net worth.
(B) assets, expenditures, and net worth.
(C) assets, liabilities, and expenses.
(D) assets, liabilities, and net worth.
(E) income, liabilities, and assets.

Answer : (D)
32. Which of the following is listed as an asset on an individual's balance sheet?
(A) Bank credit card balances
(B) Education loans
(C) Outstanding medical bills
(D) Checking accounts
(E) Leased automobiles

Answer : (D)
33. When Phil lists his house on his balance sheet, he should record its:
(A) actual purchase price.
(B) depreciated value.
(C) insured value.
(D) deferred price.
(E) fair market value.

Answer: (E)
34. Your $\qquad$ is an example of a liquid asset.
(A) home
(B) car
(C) checking account
(D) charge account
(E) life insurance cash value

Answer : (C)
35. Sam and his wife Ann purchased a home in Lubbock, Texas, in 1980 for $\$ 100,000$. Their original home mortgage payment was $\$ 90,000$. The house has a current market value of $\$ 175,000$ and a replacement value of $\$ 200,000$. They still owe $\$ 55,000$ of their home mortgage payment. In their current balance sheet, their home will be reflected as:
(A) a $\$ 200,000$ asset for the replacement value and a $\$ 55,000$ liability for the outstanding mortgage.
(B) a $\$ 200,000$ asset for the replacement value and a $\$ 90,000$ liability for the original mortgage.
(C) a $\$ 175,000$ asset for the market value and a $\$ 55,000$ liability for the outstanding mortgage.
(D) a $\$ 175,000$ asset for the market value and a $\$ 90,000$ liability for the original mortgage.
(E) a \$100,000 asset for the purchase price and a \$55,000 liability for the outstanding mortgage.

Answer : (C)
36. $\qquad$ is an example of personal property.
(A) Jewelry
(B) A mutual fund
(C) A corporate bond
(D) A charge account
(E) A certificate of deposit

Answer : (A)
37. Which of the following is an example of real property?
(A) Machinery
(B) A computer
(C) An automobile
(D) A garage
(E) Office furniture

Answer: (D)
38. $\qquad$ will be listed as a liability on your balance sheet.
(A) A money market deposit account
(B) A checking account
(C) Equipment
(D) The cash value of a life insurance policy
(E) An education loan

Answer: (E)
39. Loans should be recorded as a liability on the balance sheet at their:
(A) original outstanding balance.
(B) year-end outstanding balance.
(C) average outstanding balance.
(D) current outstanding balance.
(E) beginning outstanding balance.

Answer: (D)
40. Which of the following portions of a mortgage loan is recorded as a liability on the balance sheet?
(A) Interest only
(B) Sum of the interest paid and the outstanding balance
(C) Sum of the interest due and the outstanding balance
(D) Outstanding principal portion only
(E) Principal portion and interest paid
41. Sonny and Cher have a net worth of $\$ 35,000$ and total assets of $\$ 200,000$. If their revolving credit and unpaid bills total $\$ 2,200$, what will their long-term liabilities be?
(A) $\$ 115,000$
(B) $\$ 140,000$
(C) $\$ 142,200$
(D) $\$ 162,800$
(E) $\$ 165,000$

Answer: (D)
42. You are solvent if your:
(A) total liabilities exceed your total assets.
(B) total assets exceed your total liabilities.
(C) total assets exceed your equity.
(D) total liabilities exceed your equity.
(E) current liabilities exceed your current assets.

Answer: (B)
43. Which of the following is true of an individual's net worth?
(A) It is the sum of an individual's current assets and his or her current liabilities.
(B) It is the sum of an individual's take-home pay and his or her payroll taxes.
(C) It is the difference between an individual's current assets and his or her current liabilities.
(D) It is the difference between an individual's monthly income and his or her expenses.
(E) It is the difference between an individual's total assets and his or her total liabilities.

Answer: (E)
44. If your $\qquad$ , your net worth on the balance sheet will increase from one period to the next.
(A) liabilities increase and assets remain constant
(B) liabilities increase and assets decrease
(C) assets increase and liabilities remain constant
(D) income and liabilities decrease
(E) liabilities and expenses increase

Answer : (C)
45. The income and expense statement examines your financial:
(A) obligations.
(B) performance.
(C) position.
(D) assets.
(E) objectives.

Answer: (B)
46. An income statement includes:
(A) income, liabilities, and net worth.
(B) income, expenses, and cash surplus or deficit.
(C) expenses, net worth, and cash surplus or deficit.
(D) net worth, surplus, and profit or loss.
(E) savings, surplus, and profit or loss.

Answer : (B)
47. You record $\qquad$ on an income and expense statement.
(A) the value of your stock portfolio
(B) your installment loan balance
(C) your checking account balance
(D) your cash on hand
(E) your charitable payments

Answer: (E)
48. I should record $\qquad$ on my income and expense statement for the period of January 1 to June
30.
(A) an $\$ 800$ refrigerator I bought on credit on May 30
(B) an outstanding education loan account
(C) jewelry I purchased with an arrangement to pay later
(D) my checking account balance
(E) the groceries I bought and paid for in June

Answer: (E)
49. A cash surplus on an income and expense statement prepared on a cash basis indicates that:
(A) the net worth is equal to zero.
(B) investments are less than the cashbalance.
(C) the payments on debts are not met.
(D) the total expense is less than the total income.
(E) income and expense are equal.

Answer : (D)
50. If your statement of income and expense prepared on a cash basis shows a deficit, you have:
(A) increased your debts.
(B) liquidated your investments.
(C) increased your savings.
(D) taken a cash loan on your insurance.
(E) sold some securities.

Answer : (A)
51. When estimating income for the income and expense statement, you should:
(A) use gross income.
(B) include expected pay increases.
(C) adjust expenses for inflation.
(D) use net income less capitalized interest.
(E) use the income received and earned only.

Answer : (A)
52. If your liquid assets equal $\$ 15,000$ and your current debts equal $\$ 50,000$, your liquidity ratio is:
(A) $30 \%$.
(B) $70 \%$.
(C) $143 \%$
(D) $233 \%$.
(E) $333 \%$.

Answer: (A)
53. If your total assets equal $\$ 87,000$ and your total liabilities equal $\$ 10,000$, your solvency ratio is:
(A) 11.5\%.
(B) $13.0 \%$.
(C) 77.0\%.
(D) $87.0 \%$.
(E) $88.5 \%$.

Answer: (E)
54. Which of the following ratios indicates your ability to meet current debt payments with existing assets that can be converted to cash readily?
(A) Solvency
(B) Liquidity
(C) Cash
(D) Savings
(E) Debt service

Answer: (B)
55. A savings ratio calculated from an income and expense statement represents the:
(A) percentage of gross income saved.
(B) ability to cover immediate debt when there is an interruption in income.
(C) percentage of after-tax income saved.
(D) percentage of tax-deferred income earned annually.
(E) percentage of asset value salvaged.

Answer : (C)
56. Assume that your total income for the current year is $\$ 35,000$. Your total expenses including taxes of $\$ 5,000$ is $\$ 30,000$. Your savings ratio is:
(A) $7.5 \%$.
(B) $10.0 \%$.
(C) $12.5 \%$
(D) $13.3 \%$.
(E) 16.7\%.

Answer: (E)
57. Jacques's total monthly loan payments amount to $\$ 1,020$, while his gross income is $\$ 3,000$ per month. What is his debt service ratio?
(A) $34 \%$
(B) $43 \%$
(C) $50 \%$
(D) $75 \%$
(E) $82 \%$

Answer : (A)
58. Mike and Teresa have a monthly gross income of $\$ 5,000$. They pay $\$ 1,000$ per month toward taxes and $\$ 2,000$ per month toward various loans. What is their debt service ratio?
(A) $20 \%$
(B) $30 \%$
(C) $40 \%$
(D) $50 \%$
(E) $60 \%$

Answer : (C)
59. Which of the following is a stage in preparing a cash budget?
(A) Calculating financial ratios
(B) Estimating expenses
(C) Calculating depreciation expenses
(D) Finalizing the balance sheet
(E) Preparing the bank reconciliation report

Answer: (B)
60. A cash budget helps you:
(A) monitor and control your finances.
(B) analyze your financial position.
(C) calculate your fixed assets ratio.
(D) calculate your investment turnover ratio.
(E) analyze the use of debt in a capital structure.

Answer : (A)
61. The Wilsons' short-term goals might include:
(A) setting up an emergency fund with three months' income.
(B) buying a house.
(C) sending the kids to college.
(D) planning to retire at the age of 60 .
(E) going on a world tour.

Answer : (A)
62. There is a need for budget adjustments when:
(A) income is stable.
(B) account deficits and surpluses balance out.
(C) account deficits are more than surpluses.
(D) a new calendar year begins.
(E) short-term financial goals are achieved.

Answer : (C)
63. The best approach to solve the problem of an annual budget deficit is to:
(A) liquidate more assets than required to meet the budget shortfall for the year.
(B) borrow funds on credit cards.
(C) reduce flexible expenditures on nonessential items.
(D) reduce fixed expenses.
(E) reduce high-priority expenses on thebudget.

Answer : (C)
64. What can you do if your budget shows an annual budget deficit?
(A) You can liquidate investments to meet the total budget shortfall for the year.
(B) You can increase low-priority expenses on the budget.
(C) You can invest more in real estate/personal estate.
(D) You can discourage borrowing.
(E) You can shift expenses from the surplus months to the deficit months.

Answer: (A)
65. Your investment advisor wants you to purchase an annuity that will pay you $\$ 25,000$ per year for 10 years. If you require a $7 \%$ return, what is the most you should pay for this investment?
(A) $\$ 49,179$
(B) \$175,590
(C) $\$ 201,000$
(D) $\$ 225,682$
(E) $\$ 250,000$

Answer: (B)
66. Theresa invested $\$ 5,000$ in an account she expects will earn $7 \%$ annually. Approximately how many years will it take for the account to double in value? (Round the number of years to the nearest
whole number.)
(A) 8
(B) 9
(C) 10
(D) 11
(E) 12

Answer: (C)
67. Jamil invested $\$ 9,500$ in an account he expects will earn $5 \%$ annually. Approximately how many years will it take for the account to double in value? (Round off your answer to one decimal place.)
(A) 8.8
(B) 9.7
(C) 10.8
(D) 11.4
(E) 14.2

Answer: (E)
68. Phil has $\$ 2,000$, and he needs it to grow to $\$ 4,000$ in 8 years. Assuming he does not add any more money to this fund, what rate of interest would he need to earn? (Round off the rate of interest to the nearest whole number.)
(A) 6\%
(B) 7\%
(C) $8 \%$
(D) $9 \%$
(E) 10\%

Answer : (D)
69. Michael and Sandy purchased a home for $\$ 100,000$ five years ago. If its value appreciated at $6 \%$ annually, what is it worth today? (Round the answer to the nearest unit place.)
(A) $\$ 100,000$
(B) \$106,000
(C) $\$ 130,000$
(D) $\$ 133,823$
(E) $\$ 135,603$

Answer: (D)
70. Elena purchased a stamp collection for $\$ 5,000$ thirty years ago. If its value appreciated at $8 \%$ annually, what is it worth today? (Round the answer to the nearest unit place.)
(A) $\$ 17,000$
(B) $\$ 36,400$
(C) $\$ 50,313$
(D) $\$ 123,023$
(E) $\$ 150,000$

Answer: (C)
71. A balance sheet provides a statement of one's financial $\qquad$ .
(A) position
(B) performance
(C) goals (D)
ratios
Answer : (A)
72. The first step in financial planning is to $\qquad$ .
(A) define one's financial goals
(B) set up a budget
(C) calculate one's liquidity ratio
(D) prepare a trend analysis

Answer: (A)
73. A detailed forecast used to monitor and control expenses is called a(n) $\qquad$ .
(A) balance sheet
(B) profit and loss account
(C) budget
(D) income and expense statement

Answer : (C)
74. A $\qquad$ is an example of a liquid asset.
(A) fixed deposit of three years
(B) savings account
(C) recurring deposit of two years
(D) retirement account

Answer: (B)
75. A $\qquad$ is an example of a tangible asset.
(A) house
(B) patent
(C) copyright
(D) trademark

Answer : (A)
76. Investment assets arerequired to $\qquad$ .
(A) be used in our everyday lives.
(B) increase productivity.
(C) provide a service.
(D) earn a return.

Answer : (D)
77. A(n) $\qquad$ is an example of a current liability.
(A) auto loan
(B) credit card balance
(C) mortgage
(D) education loan

Answer : (B)
78. When your liabilities exceed your assets, you are $\qquad$ .
(A) solvent
(B) financially sound
(C) retired (D)
insolvent
Answer : (D)
79. When your assets exceed your liabilities, you are $\qquad$ .
(A) insolvent
(B) unable to meet your financial targets
(C) solvent
(D) in financial distress

Answer : (C)
80. Your car has a market value of $\$ 4,000$, while the balance of the loan against it is now $\$ 2,500$. Your ownership interest in the car is $\qquad$ .
(A) $\$ 2,500$
(B) $\$ 4,000$
(C) $\$ 6,500$
(D) $\$ 1,500$

Answer : (D)
81. Payments made on your loan obligations should $\qquad$ your net worth.
(A) increase
(B) decrease
(C) maintain
(D) eliminate

Answer : (C)
82. The total amount of salary you earn before taxes are deducted is your $\qquad$ .
(A) gross pay
(B) after-tax salary
(C) take-home salary
(D) net pay

Answer: (A)
83. You bought a $\$ 500$ stereo on an installment plan and made two payments of $\$ 75$ each during the year. On your income and expense statement for the year, you will show an expense of $\qquad$ .
(A) $\$ 150$
(B) $\$ 575$
(C) $\$ 650$
(D) $\$ 500$

Answer: (A)
84. $\qquad$ are difficult to estimate for an upcoming year.
(A) Interest payments
(B) Medical expenses
(C) Rent payments
(D) Insurance expenses

Answer: (B)
85. Total assets on your balance sheet are $\$ 6,000$ and liabilities are $\$ 2,000$. Your solvency ratio will be .
(A) $30 \%$
(B) $33 \%$
(C) $67 \%$
(D) $65 \%$

Answer : (C)
86. The liquidity ratio is designed to show the percentage of $\qquad$ you can cover with your current assets.
(A) annual credit obligations
(B) future years' credit obligations
(C) long-term credit obligations
(D) potential credit obligations

Answer: (A)
87. If your budget shows a deficit, you are required to $\qquad$ to balance your budget.
(A) increase your savings
(B) increase yourincome
(C) increase your expenses
(D) increase your investments

Answer : (B)
88. A cash budget will have value only if it is actually used and $\qquad$ .
(A) records of actual income and expenses are kept
(B) spending never deviates from the budgeted amount
(C) it reflects actual financial position
(D) it takes into account only credit transactions

Answer : (A)
89. $\qquad$ is the most preferred way for one to deal with budget deficits.
(A) Liquidating one's savings and investments
(B) Borrowing money from one's relatives
(C) Cutting one's low-priority expenses
(D) Increasing one's income

Answer : (C)
90. Once youdefine your $\qquad$ financial goals, you can prepare a cash budget for the upcoming year.
(A) semi-annual
(B) short-term
(C) quarterly
(D) long-term

Answer: (B)
91. $\qquad$ value is the value today of an amount to be received in the future.
(A) Present
(B) Future
(C) Intrinsic
(D) Extrinsic

Answer : (A)
92. The process of finding present value is called $\qquad$ .
(A) discounting
(B) calculating
(C) compounding
(D) computing

Answer : (A)

## ESSAY

93. Jean and Jim have liquid assets of $\$ 3,600$ and other assets of $\$ 42,800$. Their total liabilities equal $\$ 26,000$. What is their net worth? (Show all work.)

## Graders Info :

Net worth = Total assets - Total liabilitiesNet worth $=(\$ 42,800+\$ 3,600) ~ ? ~ \$ 26,000=\$ 20,400$
94. Rosa and Jose have liquid assets of $\$ 5,000$ and other assets of $\$ 50,000$. Their total liabilities equal $\$ 26,000$. What is their net worth? (Show all work.)

## Graders Info :

Net worth $=$ Total assets - Total liabilitiesNet worth $=(\$ 50,000+\$ 5,000) ? \$ 26,000=\$ 29,000$
95. Construct a balance sheet using the following information. Be sure the format is correct. (Show all work.)

| Cash on hand | $\$ 75$ |
| :--- | :--- |
| Bank credit card balance | 1,200 |
| Utility bill (overdue) | 100 |
| Auto loan balance | 3,500 |
| Mortgage | 75,000 |
| Primary residence | 105,000 |
| Jewelry | 2,000 |
| Stocks | 17,500 |
| Coin collection | 2,500 |
| 2001 Toyota | 7,500 |

Graders Info :

96. Construct a balance sheet using the following information. Be sure the format is correct. (Show all work.)

| Cash on hand | $\$ 500$ |
| :--- | :--- |
| Bank credit card balance | 750 |
| Taxes due | 500 |
| Utility bills (overdue) | 120 |
| Auto loan balance | 6,000 |
| Mortgage | 45,000 |
| Primary residence | 60,000 |
| Jewelry | 1,200 |
| Stocks | 6,000 |
| Coin collection | 2,500 |
| 2001 Toyota | 7,500 |
| Auto payment | 250 |

Graders Info :

97. The Harts spend $30 \%$ of their disposable income on housing, $5 \%$ on medical expenses, $25 \%$ on food, $10 \%$ on clothing, $14 \%$ on loan repayments, and $8 \%$ on entertainment. How much of their
disposable income is available for saving and investment? (Show all work.)

## Graders Info :

The disposable income is $100 \%$. The total outlays equal $92 \%$, which is calculated by adding $30 \%, 5 \%$, $25 \%, 10 \%, 14 \%$, and $8 \%$. Therefore, the total disposable income available for saving and investment = $100 \%$ - $92 \%$ = $8 \%$.
98. Inflation is expected to be $4 \%$ in the coming year. If Mr. Gonza earned $\$ 37,000$ this year, how much must he earn in the following year to keep up with inflation and maintain a balance between his income and his increasing expenditures? (Show all work.)

## Graders Info :

To keep up with an inflation of $4 \%$ in the coming year, Mr. Gonza must earn $\$ 38,480$. This is calculated as $\$ 37,000+(4$ percent of $\$ 37,000)$. Alternatively, this can also be calculated as $\$ 37,000$ $\times 1.04=\$ 38,480$.
99. Inflation is expected to be $3 \%$ in the coming year. If Mr. Gonza earned $\$ 45,000$ this year, how much must he earn in the following year to keep up with inflation and maintain a balance between his income and his increasing expenditures? (Show all work.)

## Graders Info :

To keep up with an inflation of $3 \%$ in the coming year, Mr. Gonza must earn $\$ 46,350$, which is calculated as $\$ 45,000+(3$ percent of $\$ 45,000)$. Alternatively, this can also be calculated as $\$ 45,000$ $\times 1.03=\$ 46,350$.
100. Jamie wants to have $\$ 1,000,000$ for her retirement in 25 years. How much should she save annually if she expects to earn $10 \%$ on her investments?

## Graders Info :

In the financial calculator, input the value of FV as $1000000, \mathrm{~N}$ as 25 , i as 10 , we compute the value of PMT equal to 10168.07. Hence, Jamie should save \$10,168.07.
101. The Hamptons want to have $\$ 1,750,000$ for their retirement in 30 years. How much should they save annually if they expect to earn $8 \%$ on their investments?

## Graders Info :

The future value that the Hamptons want equals $\$ 1,750,000$. The time left for retirement is 30 years, and the interest rate is $8 \%$. In the financial calculator, input the value of FV as $1750000, \mathrm{~N}$ as 30 , i
as 8 , we compute the value of PMT equal to 15448.01 . Therefore, the present value of periodic payments equals $\$ 15,448$.01.
102. The Flemings will need $\$ 80,000$ annually for 20 years during their retirement. How much will they need at retirement if they can earn a $4 \%$ rate of interest on their investment?

## Graders Info :

In the financial calculator, input the value of PMT as $80000, \mathrm{~N}$ as 20 , i as 4 , we compute the value of PV equal to 1087226.11 . Therefore, the Flemings will need $\$ 1,087,226.11$ at retirement.

