

Test Bank for Developmental Math 3rd Edition by Lial Hornsby Ginnis Salzman and Hestwood ISBN 0321854462 9780321854469

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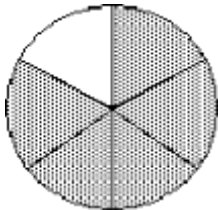
Solution Manual:

<https://testbankpack.com/p/solution-manual-for-developmental-math-3rd-edition-by-lial-hornsby-ginnis-salzman-and-hestwood-isbn-0321854462-9780321854469/>

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

Write fractions to represent the shaded and unshaded portions of the figure.

1)



A) $\frac{5}{6}, \frac{1}{6}$

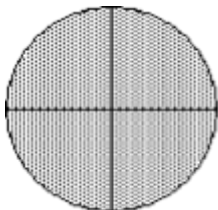
B) $\frac{5}{6}, \frac{1}{6}$

C) $\frac{1}{5}, \frac{4}{5}$

D) $\frac{1}{6}, \frac{5}{6}$

1) _____

2)



A) $\frac{7}{8}, \frac{1}{8}$

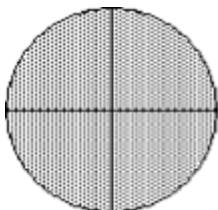
B) $\frac{7}{4}, \frac{1}{4}$

C) $\frac{1}{7}, \frac{6}{7}$

D) $\frac{3}{4}, \frac{1}{4}$

2) _____

3)



A) $\frac{5}{8}, \frac{3}{8}$

B) $\frac{5}{3}, \frac{3}{3}$

C) $\frac{3}{5}, \frac{5}{5}$

D) $\frac{5}{3}, \frac{3}{3}$

3) _____

3 3

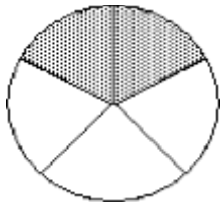
8 8

5 5

4 4

4)

4) _____



A) $\frac{2}{5}, \frac{3}{5}$

B) $\frac{2}{3}, \frac{1}{3}$

C) $\frac{5}{2}, \frac{5}{3}$

D) $\frac{3}{2}, \frac{1}{2}$

5)



A) $\frac{1}{3}, \frac{2}{3}$

B) $\frac{3}{1}, \frac{3}{2}$

C) $\frac{3}{4}, \frac{1}{4}$

D) $\frac{1}{4}, \frac{3}{4}$

5) _

6)



A) $\frac{3}{8}, \frac{5}{8}$

B) $\frac{5}{3}, \frac{5}{2}$

C) $\frac{3}{5}, \frac{2}{5}$

D) $\frac{5}{8}, \frac{3}{8}$

6) _

7)



A) $\frac{5}{3}, \frac{1}{3}$

B) $\frac{1}{5}, \frac{1}{1}$

C) $\frac{5}{1}, \frac{1}{1}$

D) $\frac{5}{6}, \frac{1}{6}$

7) _

8)



A) $\frac{7}{1}, \frac{1}{4}$

B) $\frac{7}{4}, \frac{1}{4}$

C) $\frac{7}{8}, \frac{1}{8}$

D) $\frac{1}{7}, \frac{4}{1}$

8) _

9)



A) $\frac{11}{12}, \frac{1}{12}$

B) $\frac{11}{6}, \frac{1}{6}$

C) $\frac{11}{1}, \frac{1}{12}$

D) $\frac{1}{11}, \frac{12}{1}$

9) _

10)



A) $\frac{5}{3}, \frac{1}{3}$

B) $\frac{3}{8}, \frac{5}{8}$

C) $\frac{3}{5}, \frac{2}{5}$

D) $\frac{5}{8}, \frac{3}{8}$

10) _

Solve the problem.

- 11) Of 23 crates of apples, 3 crates are Granny Smiths. What fraction of the crates are Granny Smiths? 11) _____
A) $\frac{23}{3}$ B) $\frac{20}{23}$ C) $\frac{3}{23}$ D) $\frac{23}{20}$

- 12) Of 23 crates of apples, 8 crates are Granny Smiths. What fraction of the crates are not Granny Smiths? 12) _____
A) $\frac{23}{8}$ B) $\frac{8}{23}$ C) $\frac{23}{15}$ D) $\frac{15}{23}$

- 13) A high school basketball team has 10 members. If 7 of the team members are juniors, find the fraction of the team members that are juniors. 13) _____
A) $\frac{10}{7}$ B) $\frac{7}{10}$ C) $\frac{3}{10}$ D) $\frac{10}{3}$

- 14) A high school basketball team has 12 members. If 5 of the team members are juniors and the rest are seniors, find the fraction of the team members that are seniors. 14) _____
A) $\frac{12}{7}$ B) $\frac{5}{12}$ C) $\frac{12}{5}$ D) $\frac{7}{12}$

- 15) In a microbiology class of 47 students, 23 students are graduate students. What fraction of the students are graduate students? 15) _____
A) $\frac{23}{47}$ B) $\frac{47}{24}$ C) $\frac{47}{23}$ D) $\frac{24}{47}$

- 16) In a microbiology class of 41 students, 16 students are graduate students. What fraction of the students are not graduate students? 16) _____
A) $\frac{41}{25}$ B) $\frac{41}{16}$ C) $\frac{16}{41}$ D) $\frac{25}{41}$

- 17) Of 104 bicycles in a bike rack, 37 are mountain bikes. What fraction of the bicycles are mountain bikes? 17) _____
A) $\frac{104}{67}$ B) $\frac{37}{104}$ C) $\frac{104}{37}$ D) $\frac{67}{104}$

- 18) Of 96 bicycles in a bike rack, 53 are mountain bikes. What fraction of the bicycles are not mountain bikes? 18) _____
A) $\frac{96}{53}$ B) $\frac{43}{96}$ C) $\frac{53}{96}$ D) $\frac{96}{43}$

19) Of 226 trees in the park, 53 are coniferous trees. What fraction of the trees are coniferous trees? 19) _____

A) $\frac{226}{53}$ B) $\frac{226}{173}$ C) $\frac{53}{226}$ D) $\frac{173}{226}$

20) Of 170 trees in the park, 31 are coniferous trees. What fraction of the trees are not coniferous trees? 20) _____

A) $\frac{139}{170}$ B) $\frac{170}{31}$ C) $\frac{170}{139}$ D) $\frac{31}{170}$

Identify the numerator and denominator.

$$21) \frac{7}{2}$$

21) _____

- A) Numerator 9
Denominator 1
- B) Numerator $\frac{2}{7}$
Denominator 7
- C) Numerator 2
Denominator 7
- D) Numerator 7
Denominator 2

$$22) \frac{7}{23}$$

22) _____

- A) Numerator 23
Denominator 7
- B) Numerator $\frac{7}{23}$
Denominator 1
- C) Numerator 7
Denominator 23
- D) Numerator 1
Denominator $\frac{23}{7}$

List the proper fractions in the group.

$$23) \frac{\frac{9}{7}, \frac{5}{12}, \frac{7}{15}, \frac{3}{17}}{\frac{9}{5}, \frac{7}{3}}$$

23) _____

- A) $\frac{9}{7}, \frac{5}{12}, \frac{7}{15}, \frac{3}{17}$
- B) $\frac{9}{7}, \frac{13}{17}$
- C) $\frac{9}{7}$
- D) $\frac{5}{12}, \frac{7}{15}, \frac{3}{17}$

$$24) \frac{1}{\frac{4}{7}, \frac{11}{18}, \frac{5}{4}, \frac{8}{3}}$$

24) _____

- A) $\frac{11}{7}, \frac{18}{18}, \frac{5}{4}, \frac{8}{3}$
- B) $\frac{1}{4}$
- C) $\frac{1}{4}, \frac{5}{4}, \frac{8}{3}$
- D) $\frac{1}{4}, \frac{11}{7}, \frac{18}{18}, \frac{5}{4}, \frac{8}{3}$

$$25) \frac{\frac{7}{12}, \frac{14}{13}, \frac{7}{2}, \frac{11}{4}, \frac{3}{4}}{\frac{7}{3}}$$

25) _____

- A) $\frac{7}{12}, \frac{14}{13}, \frac{7}{2}, \frac{11}{4}, \frac{3}{4}$
- B) $\frac{7}{2}, \frac{11}{4}, \frac{3}{4}$
- C) $\frac{7}{12}, \frac{11}{4}, \frac{3}{4}$
- D) $\frac{14}{13}, \frac{7}{2}, \frac{11}{4}$

$$26) \frac{\frac{16}{13}, \frac{13}{12}, \frac{11}{8}, \frac{17}{17}, \frac{2}{3}}$$

26) _____

- A) $\frac{11}{8}$
- B) $\frac{13}{12}, \frac{11}{8}, \frac{17}{17}$
- C) $\frac{16}{13}, \frac{13}{12}, \frac{11}{8}, \frac{2}{3}$
- D) $\frac{2}{3}$

27) $\frac{3}{7}, \frac{5}{19}, \frac{7}{7}, \frac{2}{11}, \frac{16}{219}$ 27) _____

A) $\frac{3}{7}, \frac{5}{19}, \frac{7}{7}, \frac{2}{11}, \frac{16}{219}$ B) $\frac{7}{7}$

C) $\frac{3}{7}, \frac{5}{19}, \frac{2}{11}, \frac{16}{219}$ D) $\frac{5}{19}, \frac{7}{7}, \frac{2}{11}$

28) $\frac{9}{7}, \frac{5}{12}, \frac{7}{15}, \frac{19}{12}, \frac{3}{17}$ 28) _____

A) $\frac{9}{7}, \frac{19}{12}$ B) $\frac{9}{7}, \frac{5}{12}, \frac{7}{15}, \frac{19}{12}, \frac{3}{17}$

C) $\frac{5}{12}, \frac{7}{15}, \frac{3}{17}$ D) $\frac{9}{7}, \frac{5}{12}, \frac{7}{15}$

List the improper fractions in the group.

29) $\frac{16}{5}, \frac{4}{61}, \frac{7}{9}, \frac{28}{28}, \frac{41}{41}$ 29) _____

A) $\frac{16}{5}, \frac{28}{28}, \frac{41}{41}$ B) $\frac{16}{5}, \frac{4}{61}, \frac{7}{9}, \frac{41}{41}$

C) $\frac{16}{5}, \frac{4}{61}, \frac{7}{9}, \frac{28}{28}, \frac{41}{41}$ D) $\frac{4}{61}, \frac{7}{9}$

30) $\frac{45}{4}, \frac{5}{13}, \frac{2}{6}, \frac{32}{23}, \frac{58}{58}$ 30) _____

A) $\frac{5}{13}, \frac{2}{6}$ B) $\frac{45}{4}, \frac{5}{13}, \frac{2}{6}, \frac{58}{58}$

C) $\frac{45}{4}, \frac{32}{23}, \frac{58}{58}$ D) $\frac{45}{4}, \frac{5}{13}, \frac{2}{6}, \frac{32}{23}, \frac{58}{58}$

31) $\frac{47}{4}, \frac{4}{38}, \frac{2}{3}, \frac{63}{49}, \frac{43}{43}$ 31) _____

A) $\frac{47}{4}, \frac{4}{38}, \frac{2}{3}, \frac{63}{49}, \frac{43}{43}$ B) $\frac{4}{38}, \frac{2}{3}$

C) $\frac{47}{4}, \frac{63}{49}, \frac{43}{43}$ D) $\frac{47}{4}, \frac{4}{38}, \frac{2}{3}, \frac{43}{43}$

32) $\frac{55}{2}, \frac{2}{56}, \frac{4}{9}, \frac{60}{16}, \frac{58}{58}$ 32) _____

A) $\frac{2}{56}, \frac{4}{9}$ B) $\frac{55}{2}, \frac{2}{56}, \frac{4}{9}, \frac{60}{16}, \frac{58}{58}$

C) $\frac{55}{2}, \frac{2}{56}, \frac{4}{9}, \frac{58}{58}$ D) $\frac{55}{2}, \frac{60}{16}, \frac{58}{58}$

$$33) \frac{48}{8'} \frac{2}{10'} \frac{4}{8'} \frac{59}{19} \frac{25}{25}$$

$$A) \frac{48}{8'} \frac{59}{19'} \frac{25}{25}$$

$$C) \frac{2}{10'} \frac{4}{8}$$

$$B) \frac{48}{8'} \frac{2}{10'} \frac{4}{8'} \frac{59}{19} \frac{25}{25}$$

$$D) \frac{48}{8'} \frac{2}{10'} \frac{4}{8'} \frac{25}{25}$$

33) _____

$$34) \frac{50}{7'} \frac{6}{48'} \frac{7}{9'} \frac{20}{12} \frac{22}{22}$$

$$A) \frac{50}{7'} \frac{6}{48'} \frac{7}{9'} \frac{22}{22}$$

$$C) \frac{6}{48'} \frac{7}{9}$$

$$B) \frac{50}{7'} \frac{20}{12'} \frac{22}{22}$$

$$D) \frac{50}{7'} \frac{6}{48'} \frac{7}{9'} \frac{20}{12} \frac{22}{22}$$

34) _____

Fill in the blanks to complete the sentence.

35) The fraction $\frac{26}{58}$ represents _____ of the _____ equal parts into which a whole is divided.

$$A) \frac{26}{58}, 58$$

$$B) \frac{26}{58}, 26$$

C) 58, 26

D) 26, 58

35) _____

Write the mixed number as an improper fraction.

$$36) 5\frac{7}{8}$$

$$A) \frac{40}{8}$$

$$B) \frac{47}{8}$$

$$C) \frac{40}{7}$$

$$D) \frac{47}{7}$$

36) _____

$$37) 2\frac{5}{9}$$

$$A) \frac{18}{5}$$

$$B) \frac{18}{9}$$

$$C) \frac{23}{9}$$

$$D) \frac{23}{5}$$

37) _____

$$38) 3\frac{2}{5}$$

$$A) \frac{17}{2}$$

$$B) \frac{15}{5}$$

$$C) \frac{15}{2}$$

$$D) \frac{17}{5}$$

38) _____

$$39) 2\frac{3}{7}$$

$$A) \frac{17}{7}$$

$$B) \frac{14}{3}$$

$$C) \frac{17}{3}$$

$$D) \frac{14}{7}$$

39) _____

$$40) 18\frac{1}{10}$$

$$A) \frac{181}{10}$$

$$B) \frac{19}{10}$$

$$C) \frac{18}{10}$$

$$D) \frac{191}{10}$$

40) _____

41) $18\frac{14}{15}$

A) 32

B) $\frac{284}{15}$

C) $\frac{84}{5}$

D) 252

41) _____

Write the improper fraction as a whole or mixed number.

42) $\frac{11}{3}$

A) $3\frac{2}{3}$

B) $4\frac{2}{3}$

C) $2\frac{2}{7}$

D) $\frac{2}{3}$

42) _____

43) $\frac{22}{4}$

A) $6\frac{1}{2}$

B) $5\frac{1}{2}$

C) $4\frac{1}{2}$

D) $5\frac{1}{7}$

43) _____

44) $\frac{26}{5}$

A) $5\frac{1}{5}$

B) $6\frac{1}{5}$

C) $4\frac{1}{5}$

D) $5\frac{1}{7}$

44) _____

45) $\frac{7}{2}$

A) $4\frac{1}{2}$

B) $3\frac{1}{2}$

C) $3\frac{1}{7}$

D) $2\frac{1}{2}$

45) _____

46) $\frac{36}{8}$

A) $4\frac{4}{7}$

B) $5\frac{4}{8}$

C) $4\frac{4}{8}$

D) $3\frac{4}{8}$

46) _____

47) $\frac{168}{7}$

A) 167

B) $\frac{24}{2}$

C) 169

D) 24

47) _____

48) $\frac{296}{11}$

A) $296\frac{11}{296}$

49) $\frac{317}{2}$

317

B) $\frac{11}{296}$

B) $158\frac{1}{2}$

2

2
4
5
5

$$\text{C) } 296 \overline{) 296} \\ 11$$

$$\text{D) } 26 \overline{) 26} \\ 11$$

$$48) \underline{\hspace{2cm}}$$

$$\text{C) } 1585 \overline{) 317} \\ 2$$

$$\frac{2}{31} \\ 7$$

$$49) \underline{\hspace{2cm}}$$

D)

50) $\frac{2058}{14}$

A) 147

B) 2057

C) $\frac{147}{2}$

D) 2059

50) _____

Find all the factors for the number.

51) 30

A) 1, 2, 3, 5, 6, 10, 15, 30

C) 5, 6, 10, 30

B) 1, 5, 6, 30

D) 1, 2, 3, 5, 6, 10, 20, 30

51) _

52) 28

A) 1, 2, 4, 7, 8, 14, 28

C) 2, 7, 14, 28

B) 1, 2, 7, 14, 28

D) 1, 2, 4, 7, 14, 28

52) _

53) 36

A) 2, 4, 6, 12, 18, 36

C) 1, 2, 3, 4, 6, 9, 12, 18, 36

B) 1, 2, 3, 4, 5, 6, 9, 10, 12, 18, 36

D) 1, 2, 4, 6, 12, 18, 36

53) _

54) 45

A) 1, 3, 5, 15, 45

C) 1, 2, 3, 5, 9, 15, 30, 45

B) 1, 3, 5, 9, 15, 30, 45

D) 1, 3, 5, 9, 15, 45

54) _

55) 56

A) 1, 2, 4, 7, 8, 14, 18, 28, 56

C) 1, 2, 3, 4, 7, 8, 14, 18, 28, 56

B) 2, 4, 7, 8, 14, 28

D) 1, 2, 4, 7, 8, 14, 28, 56

55) _

56) 63

A) 1, 3, 7, 9, 21, 63

C) 1, 2, 3, 7, 9, 21, 36, 63

B) 3, 5, 7, 9, 11, 21, 63

D) 1, 3, 5, 7, 9, 11, 21, 63

56) _

57) 66

A) 1, 2, 3, 9, 11, 22, 33, 66

C) 1, 2, 3, 6, 11, 22, 33, 66

B) 1, 3, 11, 22, 33, 66

D) 1, 2, 3, 4, 11, 16, 22, 33, 66

57) _

58) 70

A) 1, 2, 3, 5, 7, 9, 15, 35, 70

C) 1, 2, 5, 7, 35, 70

B) 1, 2, 5, 7, 10, 14, 35, 70

D) 1, 3, 5, 7, 9, 15, 20, 35, 70

58) _

59) 72

A) 1, 2, 3, 4, 6, 8, 9, 12, 24, 36, 72

C) 1, 2, 3, 4, 6, 9, 12, 14, 18, 24, 36, 72

B) 1, 2, 3, 4, 6, 8, 9, 12, 18, 24, 36, 72

D) 1, 2, 3, 4, 5, 6, 7, 8, 9, 12, 18, 24, 36, 72

59) _

60) 84

A) 1, 2, 3, 4, 7, 14, 21, 28, 42, 84

C) 1, 2, 3, 4, 5, 6, 7, 8, 9, 12, 14, 21, 28, 42, 84

B) 1, 2, 3, 4, 6, 7, 12, 14, 21, 28, 42, 84

D) 1, 2, 3, 4, 6, 7, 12, 14, 21, 42, 84

60) _

Decide whether the number is prime or composite.

61) 44

A) Prime

B) Composite

61) _____

62) 29
A) Prime
B) Composite
62) _____

63) 36
A) Prime
B) Composite
63) _____

64) 19
A) Prime
B) Composite
64) _____

65) 10
A) Prime
B) Composite
65) _____

Find the prime factorization of the number. Write the answer with exponents when repeated factors appear.

66) 12
A) $4 \cdot 3$
B) 3^2
C) $4 \cdot 2$
D) $2^2 \cdot 3$
66) _____

67) 265
A) $5^2 \cdot 53$
B) $5 \cdot 53$
C) 5^2
D) $5 \cdot 51$
67) _____

68) 176
A) $2^4 \cdot 11$
B) $2^3 \cdot 13$
C) $2^3 \cdot 11$
D) $2^4 \cdot 7$
68) _____

69) 72
A) $2^2 \cdot 3^2$
B) $2^3 \cdot 3$
C) $2^3 \cdot 3^2$
D) $2^2 \cdot 3$
69) _____

70) 110
A) $2 \cdot 5 \cdot 11$
B) $10 \cdot 11$
C) $5^2 \cdot 2$
D) $2^2 \cdot 11$
70) _____

71) 350
A) $2^2 \cdot 5^2 \cdot 7$
B) $2 \cdot 5 \cdot 7$
C) $14 \cdot 5^2$
D) $2 \cdot 5^2 \cdot 7$
71) _____

72) 684
A) $3^4 \cdot 19$
B) $2^2 \cdot 3^2 \cdot 19$
C) $2^3 \cdot 3^2 \cdot 19$
D) $2^4 \cdot 19$
72) _____

73) 936
A) $2^4 \cdot 3 \cdot 13$
B) $2^3 \cdot 3^3 \cdot 13$
C) $2^3 \cdot 3^2 \cdot 13$
D) $2 \cdot 3^4 \cdot 13$
73) _____

74) 5200

A) $2^3 \cdot 5^2 \cdot 13$

B) $2^4 \cdot 5^2 \cdot 11$

C) $2^4 \cdot 5^2 \cdot 13$

D) $2^4 \cdot 5 \cdot 13$

74) _____

75) 1260

A) $2^2 \cdot 3^2 \cdot 5 \cdot 7$

B) $2^2 \cdot 3^2 \cdot 5 \cdot 11$

C) $2^2 \cdot 3^2 \cdot 7$

D) $2^3 \cdot 3^2 \cdot 5 \cdot 7$

75) _____

Determine whether the number is divisible by 2, 3, 4, 5, 6, 7, 8, 9, and/or 10.

76) 24

A) 2, 3, 4, 6, 8

B) 2, 3, 4, 8

C) 2, 3, 4

D) 2, 3, 4, 6

76) _____

- 77) 2232
 A) 2, 3, 4, 6, 8, 9 B) 2, 3, 4, 8 C) 2, 3, 6, 8 D) 2, 3, 4 77) _____
- 78) 83
 A) 3, 7 B) 3, 5 C) None D) 3 78) _____
- 79) 2701
 A) 3 B) None C) 3, 7 D) 3, 5 79) _
- 80) 85,963
 A) 3, 7 B) None C) 3, 5 D) 3 80) _
- 81) 12,118
 A) 2 B) 3, 4 C) 4 D) 2, 3, 4 81) _
- 82) 22,962
 A) 2, 3, 6 B) 2, 3, 4 C) 4, 5, 6 D) 3, 4, 6 82) _
- 83) 14,335
 A) 10 B) 2, 5, 10 C) 5 D) 5, 10 83) _
- 84) 2697
 A) 3, 9 B) 3 C) 2, 3, 9 D) 9 84) _
- 85) 33,620
 A) 2, 5 B) 2, 4, 5, 10 C) 4, 5 D) 4, 5, 10 85) _

Write the fraction in lowest terms.

- 86) $\frac{6}{10}$
 A) $\frac{3}{5}$ B) $\frac{6}{5}$ C) $\frac{3}{10}$ D) $\frac{5}{3}$ 86) _____
- 87) $\frac{3}{18}$
 A) $\frac{1}{18}$ B) $\frac{1}{6}$ C) $\frac{2}{7}$ D) $\frac{2}{12}$ 87) _____
- 88) $\frac{40}{48}$
 A) $\frac{8}{6}$ B) $\frac{5}{8}$ C) $\frac{40}{48}$ D) $\frac{5}{6}$ 88) _____
- 89) $\frac{60}{135}$
 A) $\frac{60}{135}$ B) $\frac{15}{9}$ C) $\frac{4}{15}$ D) $\frac{4}{9}$ 89) _____

90) $\frac{26}{49}$ 90) _____
 A) $\frac{26}{49}$ B) $\frac{24}{13}$ C) $\frac{13}{24}$ D) $\frac{1}{49}$

91) $\frac{30}{40}$ 91) _____
 $\frac{10}{4}$ B) $\frac{3}{4}$ $\frac{30}{40}$ D) $\frac{3}{10}$
 A) 4 C) 40

92) $\frac{52}{76}$ 92) _____
 A) $\frac{13}{19}$ B) $\frac{4}{19}$ C) $\frac{52}{76}$ D) $\frac{13}{4}$

93) $\frac{70}{80}$ 93) _____
 $\frac{7}{8}$ B) $\frac{10}{8}$ $\frac{7}{10}$ D) $\frac{70}{80}$
 A) 8 C) 10

94) $\frac{198}{288}$ 94) _____
 A) $\frac{198}{288}$ B) $\frac{11}{16}$ C) $\frac{11}{18}$ D) $\frac{18}{16}$

95) $\frac{576}{32}$ 95) _____
 A) 18 B) $\frac{1}{18}$ C) $\frac{576}{32}$ D) 19

Write the numerator and denominator of the fraction as a product of prime factors and divide by the common factors. Then write the fraction in lowest terms.

96) $\frac{8}{16}$ 96) _____
 A) $\frac{2 \cdot 2 \cdot 2}{2 \cdot 2 \cdot 2 \cdot 2} = \frac{1}{4}$ B) $\frac{2 \cdot 2}{2 \cdot 2 \cdot 2} = \frac{1}{2}$ C) $\frac{2 \cdot 2 \cdot 2}{2 \cdot 2 \cdot 2} = \frac{1}{4}$ D) $\frac{2 \cdot 2 \cdot 2}{2 \cdot 2 \cdot 2 \cdot 2} = \frac{1}{2}$

97) $\frac{91}{156}$ $2 \cdot 2 \cdot 3 \cdot 13$
 A) $\frac{2 \cdot 2 \cdot 3 \cdot 13}{2 \cdot 7 \cdot 13} = \frac{13}{7}$ B) $\frac{7 \cdot 13}{2 \cdot 2 \cdot 3 \cdot 13} = \frac{7}{12}$ 13
 C) $\frac{2 \cdot 7 \cdot 13}{2 \cdot 7 \cdot 13} = \frac{7}{7}$ D) $\frac{5 \cdot 13}{5 \cdot 13} = \frac{65}{65}$ $2 \cdot 3 \cdot 13$

98) $\frac{40}{36}$

A) $\frac{2 \cdot 2 \cdot 2 \cdot 5}{2 \cdot 2 \cdot 2 \cdot 3} = \frac{5}{3}$

C) $\frac{2 \cdot 2 \cdot 5 \cdot 5}{2 \cdot 2 \cdot 3 \cdot 3} = \frac{25}{9}$

B) $\frac{2 \cdot 2 \cdot 5}{2 \cdot 3 \cdot 3} = \frac{10}{9}$

D) $\frac{2 \cdot 2 \cdot 2 \cdot 5}{2 \cdot 2 \cdot 3 \cdot 3} = \frac{10}{9}$

98) _____

99) $\frac{1512}{132}$

A) $\frac{2 \cdot 2 \cdot 2 \cdot 3 \cdot 3 \cdot 3 \cdot 7}{2 \cdot 2 \cdot 3 \cdot 11} = \frac{1512}{132}$

C) $\frac{2 \cdot 2 \cdot 2 \cdot 3 \cdot 3 \cdot 3 \cdot 7}{2 \cdot 2 \cdot 3 \cdot 11} = \frac{126}{11}$

B) $\frac{2 \cdot 2 \cdot 3 \cdot 3 \cdot 3 \cdot 7}{2 \cdot 3 \cdot 11} = \frac{126}{11}$

D) $\frac{2 \cdot 3 \cdot 3 \cdot 7}{11} = \frac{126}{11}$

99) _____

Write the fractions in lowest terms. Then determine whether the pair of fractions is equivalent or not equivalent.

100) $\frac{2}{7}$ and $\frac{30}{105}$

A) Equivalent

B) Not equivalent

100) _____

101) $\frac{2}{6}$ and $\frac{36}{78}$

A) Equivalent

B) Not equivalent

101) _____

102) $\frac{5}{7}$ and $\frac{19}{21}$

A) Equivalent

B) Not equivalent

102) _____

103) $\frac{1}{5}$ and $\frac{10}{50}$

A) Equivalent

B) Not equivalent

103) _____

104) $\frac{49}{70}$ and $\frac{42}{60}$

A) Equivalent

B) Not equivalent

104) _____

105) $\frac{70}{110}$ and $\frac{77}{132}$

A) Equivalent

B) Not Equivalent

105) _____

Multiply. Write the answer in lowest terms.

106) $\frac{6}{7} \cdot \frac{1}{6}$

A) $\frac{7}{13}$

B) $\frac{6}{13}$

C) $\frac{1}{7}$

D) $\frac{6}{42}$

106) _____

$$107) \frac{1}{8} \cdot \frac{4}{5} \qquad 107) \underline{\hspace{2cm}}$$

A) $\frac{4}{40}$ B) $\frac{5}{13}$ C) $\frac{1}{10}$ D) $\frac{4}{9}$

$$108) \frac{1}{3} \cdot \frac{8}{9} \qquad 108) \underline{\hspace{2cm}}$$

A) $\frac{27}{8}$ B) $\frac{8}{27}$ C) $\frac{3}{4}$ D) $\frac{8}{3}$

$$109) \frac{3}{4} \cdot \frac{5}{8} \qquad 109) \underline{\hspace{2cm}}$$

A) $\frac{32}{15}$ B) $\frac{2}{3}$ C) $\frac{15}{32}$ D) $\frac{5}{6}$

$$110) \frac{1}{3} \cdot \frac{12}{35} \qquad 110) \underline{\hspace{2cm}}$$

A) $\frac{35}{36}$ B) $\frac{36}{35}$ C) $\frac{4}{35}$ D) 4

$$111) \frac{4}{7} \cdot \frac{1}{4} \cdot \frac{1}{3} \qquad 111) \underline{\hspace{2cm}}$$

A) $\frac{1}{21}$ B) $\frac{16}{21}$ C) $\frac{4}{21}$ D) $\frac{1}{14}$

$$112) \frac{1}{4} \cdot \frac{4}{5} \cdot \frac{1}{8} \qquad 112) \underline{\hspace{2cm}}$$

A) $\frac{8}{5}$ B) $\frac{1}{32}$ C) $\frac{1}{40}$ D) $\frac{1}{5}$

$$113) \frac{12}{25} \cdot \frac{40}{66} \cdot \frac{15}{32} \qquad 113) \underline{\hspace{2cm}}$$

A) $\frac{6}{11}$ B) $\frac{3}{11}$ C) $\frac{3}{44}$ D) $\frac{3}{22}$

$$114) \frac{48}{64} \cdot \frac{16}{27} \cdot \frac{45}{24} \qquad 114) \underline{\hspace{2cm}}$$

A) $\frac{5}{18}$ B) $\frac{5}{6}$ C) $\frac{5}{24}$ D) $\frac{5}{9}$

Multiply. Write the answer in lowest terms and as a whole or mixed number where possible.

$$115) 42 \cdot \frac{2}{7} \qquad 115) \underline{\hspace{2cm}}$$

A) $18\frac{1}{49}$

B) 12

C) 6

D) 10

116) $24 \cdot \frac{5}{9}$ 116) _____
 A) 40 B) $\frac{5}{27}$ C) 5 D) $13\frac{1}{3}$

117) $120 \cdot \frac{1}{6}$ 117) _____
 A) 20 B) $\frac{1}{6}$ C) 2 D) $\frac{120}{6}$

118) $90 \cdot \frac{2}{3}$ 118) _____
 A) 120 B) 80 C) 90 D) 60

119) $\frac{4}{5} \cdot 325$ 119) _____
 A) 260 B) $81\frac{1}{4}$ C) 256 D) 325

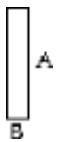
120) $\frac{2}{7} \cdot 131$ 120) _____
 A) $\frac{2}{7}$ B) 262 C) $37\frac{3}{7}$ D) $\frac{2}{917}$

121) $30 \cdot \frac{1}{10} \cdot \frac{5}{21}$ 121) _____
 A) 15 B) $\frac{1}{14}$ C) $\frac{7}{5}$ D) $1\frac{2}{5}$

122) $\frac{66}{60} \cdot 720 \cdot \frac{4}{8}$ 122) _____
 A) 440 B) 396 C) 360 D) 400

Find the area of the rectangle.

123) 123) _____



$A = \frac{8}{132}$ foot square foot
 $B = \frac{1}{4}$ foot

B) $\frac{8}{52}$ square foot

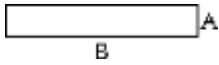
C) $\frac{8}{17}$ square foot

D) $\frac{9}{17}$ sq

A)

uare foot

124)



$$A = \frac{5}{9} \text{ in.}$$

$$B = 9 \text{ in.}$$

A) $\frac{86}{9} \text{ in.}^2$

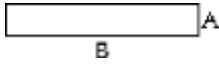
B) $\frac{45}{9} \text{ in.}^2$

C) $\frac{14}{9} \text{ in.}^2$

D) 5 in.^2

124) _____

125)



$$A = \frac{16}{27} \text{ mi}$$

$$B = \frac{18}{22} \text{ mi}$$

A) $\frac{288}{594} \text{ mi}^2$

B) $\frac{34}{49} \text{ mi}^2$

C) $\frac{16}{33} \text{ mi}^2$

D) $\frac{7}{10} \text{ mi}^2$

125) _____

Solve the problem. Write the answer in lowest terms and as a whole or mixed number where possible.

126) Find the area of a rectangular banner having a length of 15 feet and a width of $\frac{1}{12}$ foot.

A) $3\frac{3}{4} \text{ ft}^2$

B) $\frac{1}{36} \text{ ft}^2$

C) 1 ft^2

D) $1\frac{1}{4} \text{ ft}^2$

126) _____

127) Find the area of a rectangular table top having a length of 4 feet and a width of $\frac{11}{4}$ feet.

A) 11 ft^2

B) $7\frac{1}{2} \text{ ft}^2$

C) $3\frac{3}{4} \text{ ft}^2$

D) $\frac{1}{11} \text{ ft}^2$

127) _____

128) A rectangular parking lot measures $\frac{3}{10}$ mile by $\frac{2}{15}$ mile. Find the area of the parking lot.

A) $\frac{1}{30} \text{ mi}^2$

B) $\frac{1}{5} \text{ mi}^2$

C) $\frac{2}{75} \text{ mi}^2$

D) $\frac{1}{25} \text{ mi}^2$

128) _____

129) Layer Cake A is $\frac{1}{2}$ yard long and $\frac{1}{4}$ yard wide. Layer Cake B is $\frac{3}{8}$ yard long and $\frac{1}{2}$ yard wide.

Which cake has the larger area?

A) Layer Cake B

B) Layer Cake A

129) _____

Solve the problem.

$$\frac{3}{2}$$

24

130) A rectangular parking lot measures $\frac{1}{91}$ mile by $\frac{13}{182}$ mile. Find the area of the parking lot.

130) _____

A) $\frac{2}{91}$ mi²

B) $\frac{5}{182}$ mi²

C) $\frac{5}{27}$ mi²

D) $\frac{3}{91}$ mi²

- 131) Find the area of a rectangular table top having a length of 5 feet and a width of $\frac{11}{4}$ feet. 131) _____
 A) 4 ft^2 B) $13\frac{3}{4} \text{ ft}^2$ C) $\frac{4}{55} \text{ ft}^2$ D) 8 ft^2
- 132) A rectangular sheet of paper measures $\frac{2}{5}$ foot by $\frac{1}{5}$ foot. Find its area. 132) _____
 A) $\frac{3}{5} \text{ ft}^2$ B) $\frac{2}{25} \text{ ft}^2$ C) $\frac{3}{10} \text{ ft}^2$ D) $\frac{3}{25} \text{ ft}^2$
- 133) A rectangular dog bed is $\frac{2}{7}$ yard by $\frac{1}{7}$ yard. Find its area. 133) _____
 A) $\frac{3}{14} \text{ yd}^2$ B) $\frac{3}{49} \text{ yd}^2$ C) $\frac{2}{49} \text{ yd}^2$ D) $\frac{3}{7} \text{ yd}^2$
- 134) A warehouse stores 1230 different inventory items, of which $\frac{3}{10}$ are perishable. How many of the 134) _____
 inventory items are perishable?
 A) 369 items B) 366 items C) 374 items D) 615 items
- 135) Mr. and Mrs. Williams have a car loan of \$9100. They have paid off $\frac{8}{13}$ of the loan. How much of 135) _____
 the loan have they paid off?
 A) \$700 B) \$6400 C) \$5600 D) \$4800
- 136) During elections at the local union, $\frac{4}{7}$ of the members voted. If there are 105 members, how many 136) _____
 voted?
 A) 60 members B) 56 members C) 64 members D) 15 members
- 137) A restaurant has a capacity of 33 patrons. If the restaurant is $\frac{7}{11}$ full, how many patrons are at the 137) _____
 restaurant?
 A) 21 patrons B) 14 patrons C) 3 patrons D) 28 patrons
- 138) Rich can machine 90 units in 10 hours. How many units can he machine in 2 hours? 138) _____
 A) 18 units B) 180 units C) 9 units D) 4 unit(s)
- 139) Betsy can ride her bike 30 miles in 6 hours. How many miles can she ride in 4 hours? 139) _____
 A) 20 miles B) 5 miles C) 1 mile(s) D) 120 miles
- 140) One fifth of Mary's earned income is deducted from her paycheck for withholdings. Three fourths 140) _____
 of the withholdings are for taxes. What fraction of Mary's earned income is deducted for taxes?

A) $\frac{4}{15}$

B) $\frac{1}{5}$

C) $\frac{4}{9}$

D) $\frac{3}{20}$

141) One fifth of Joan's earned income is deducted for withholdings. Three tenths of the withholdings are for federal income tax. What fraction of Joan's earned income is deducted for federal income tax? 141) _____

- A) $\frac{3}{50}$ B) $\frac{4}{15}$ C) $\frac{2}{3}$ D) $\frac{2}{25}$

142) One fifth of Joe's earned income is deducted for withholdings. One third of the withholdings are for social security (FICA). What fraction of Joe's earned income is deducted for social security? 142) _____

- A) $\frac{1}{15}$ B) $\frac{2}{15}$ C) $\frac{1}{4}$ D) $\frac{3}{5}$

143) A certain scholarship will pay for $\frac{3}{5}$ of a student's total tuition. How much will a student who receives this scholarship pay toward tuition, if tuition is \$300? 143) _____

- A) \$240 B) \$120 C) \$297 D) \$180

Use the circle graph to answer the question.

144) Last year, one family ate fast food 576 times. The circle graph shows the types of food eaten for the year. Find the number of times fish was eaten. 144) _____



- A) 192 times B) 72 times C) 36 times D) 144 times

145) On a typical night at Skinny's Pizza, 240 pizzas are ordered. How many pepperoni pizzas are ordered?

145) _____



- A) 720 pizzas B) 60 pizzas C) 48 pizzas D) 80 pizzas

The following table shows the earnings for the Juarez family last year. Use this information to answer the question.

Month	Earnings	Month	Earnings
Jan.	\$1400	July	\$1300
Feb.	\$1150	Aug.	\$2450
Mar.	\$2950	Sept.	\$2500
Apr.	\$2300	Oct.	\$2000
May	\$1650	Nov.	\$2350
June	\$2700	Dec.	\$2400

146) What was the family's total income from January thru June?

146) _____

- A) \$13,000 B) \$11,000 C) \$9,200 D) \$12,150

147) What was the family's total income for the year?

147) _____

- A) \$25,150 B) \$22,000 C) \$23,750 D) \$24,000

148) If the family paid $\frac{1}{5}$ of their total income in taxes for the year, how much was paid in taxes?

148) _____

- A) \$5920 B) \$5030 C) \$4200 D) \$5400

149) If $\frac{7}{100}$ of the family's total income was spent on clothing, how much was spent for clothing last year?

149) _____

- A) \$1680 B) \$2030 C) \$1760.50 D) \$1890

150) The family saved $\frac{1}{10}$ of their total income each month. How much savings did they have at the

150) _____

end of June?

- A) \$1215 B) \$920 C) \$1160 D) \$1300

- 151) The family saved $\frac{9}{100}$ of their total income each month. How much savings did they have at the end of the year? 151) _____
 A) \$2430 B) \$2664 C) \$2263.50 D) \$1890
- 152) The family used $\frac{7}{100}$ of their income for food purchases. How much did they spend on food purchases for the year? 152) _____
 A) \$1760.50 B) \$1470 C) \$1890 D) \$2072
- 153) The family used $\frac{13}{100}$ of their income on rent payments. How much did they spend on rent for the year? 153) _____
 A) \$3510 B) \$3848 C) \$2730 D) \$3269.50
- 154) If $\frac{1}{10}$ of the family income is spent on entertainment, how much did they spend for entertainment last year? 154) _____
 A) \$2960 B) \$2700 C) \$2100 D) \$2515
- 155) Other expenses account for $\frac{7}{50}$ of the family income. How much was spent last year on other expenses? 155) _____
 A) \$3521 B) \$2800 C) \$2940 D) \$3864

Find the reciprocal.

- 156) $\frac{8}{13}$ 156) _____
 A) 13 B) $\frac{8}{13}$ C) $\frac{1}{8}$ D) $\frac{13}{8}$
- 157) $\frac{1}{19}$ 157) _____
 A) $\frac{1}{19}$ B) No reciprocal C) 19 D) 1
- 158) 9 158) _____
 A) 1 B) No reciprocal C) $\frac{1}{9}$ D) 9
- 159) $\frac{12}{11}$ 159) _____
 A) $\frac{11}{12}$ B) $\frac{1}{12}$ C) 11 D) $\frac{1}{11}$

Divide. Write the answer in lowest terms and as a whole or mixed number where possible.

$$160) \frac{5}{4} \div \frac{2}{5}$$

A) $3\frac{1}{8}$

B) 10

C) $\frac{1}{2}$

D) $\frac{1}{20}$

160) _____

$$161) \frac{1}{2} \div \frac{7}{5}$$

A) $\frac{5}{14}$

B) $2\frac{1}{2}$

C) $2\frac{4}{5}$

D) $\frac{1}{7}$

161) _____

$$162) \frac{1}{6} \div \frac{5}{6}$$

A) 5

B) $\frac{1}{5}$

C) $1\frac{1}{5}$

D) $\frac{5}{6}$

162) _____

$$163) \frac{1}{2} \div \frac{3}{5}$$

A) $\frac{5}{6}$

B) 10

C) $1\frac{1}{5}$

D) $\frac{1}{10}$

163) _____

$$164) \frac{1}{5} \div \frac{7}{8}$$

A) $\frac{8}{35}$

B) $4\frac{3}{8}$

C) $\frac{7}{40}$

D) $5\frac{5}{7}$

164) _____

$$165) \frac{4}{9} \div \frac{6}{5}$$

A) $1\frac{7}{8}$

B) $\frac{8}{15}$

C) $\frac{10}{27}$

D) $2\frac{7}{10}$

165) _____

$$166) \frac{1}{3} \div \frac{1}{6}$$

A) 18

B) $\frac{1}{18}$

C) 2

D) $\frac{1}{2}$

166) _____

$$167) \frac{5}{13} \div \frac{15}{52}$$

A) $\frac{75}{676}$

B) $1\frac{1}{3}$

C) $6\frac{2}{3}$

D) $\frac{3}{4}$

167) _____

168)

$$\frac{\frac{5}{6}}{\frac{1}{6}}$$

A) 5

B) $\frac{1}{2}$

C) $\frac{5}{6}$

D) $\frac{5}{36}$

168) _____

169)

$$\frac{\frac{5}{12}}{\frac{5}{18}}$$

A) $1\frac{1}{2}$

B) $\frac{25}{216}$

C) $\frac{2}{3}$

D) $7\frac{1}{2}$

169) _____

$$170) 4 \div \frac{2}{5}$$

A) 10

B) $\frac{1}{10}$

C) $1\frac{3}{5}$

D) 2^2

170) _____

$$171) 12 \div \frac{2}{7}$$

A) $\frac{1}{42}$

B) 12

C) 42

D) $3\frac{3}{7}$

171) _____

$$172) 15 \div \frac{3}{5}$$

A) 5

B) 25

C) $\frac{1}{25}$

D) 9^9

172) _____

$$173) 4 \div \frac{3}{8}$$

A) $1\frac{1}{2}$

B) $\frac{1}{12}$

C) $\frac{3}{32}$

D) $10\frac{2}{3}$

173) _____

$$174) \frac{7}{8} \div 8$$

A) $\frac{1}{7}$

B) $\frac{7}{64}$

C) 7

D) $\frac{1}{64}$

174) _____

$$175) \frac{1}{2} \div 8$$

A) $\frac{1}{16}$

16

B) 2

175) _____

C) 16

D) $\frac{1}{6}$

6

$$176) \frac{15}{7} \div 5$$

176) _____

A) $2\frac{1}{3}$

B) $10\frac{5}{7}$

C) $\frac{3}{7}$

D) 3

177)

$$\frac{24}{\frac{2}{5}}$$

177) _____

A) 60

B) 24

C) $\frac{1}{60}$

D) $9\frac{3}{5}$

178)

$$\frac{18}{\frac{3}{5}}$$

178) _____

A) $10\frac{4}{5}$

B) 6

C) $\frac{1}{30}$

D) 30

179)

$$\frac{\frac{8}{7}}{2}$$

179) _____

A) $\frac{4}{7}$

B) $2\frac{2}{7}$

C) 4

D) $1\frac{3}{4}$

Solve the problem.

180) A land developer wants to develop 20 acres of land. Each lot in the development is to be $\frac{1}{4}$ of an

180) _____

acre. How many lots will the land developer have in the 20 acres?

A) 80 lots

B) $3\frac{5}{7}$ lot

C) 5 lot(s)

D) $3\frac{1}{4}$ lots

16

5

181) A box of cereal contains about 12 cups. A serving size is $\frac{3}{4}$ cup. About how many servings are in

181) _____

the box of cereal?

A) 16 servings

B) $3\frac{3}{4}$ servings

C) $5\frac{1}{3}$ servings

D) 9 servings

182) A bag of chips weighs 24 ounces. A serving size is $\frac{3}{4}$ ounce. How many servings are in the bag of

chips?

A) 18 servings

B) $6\frac{3}{4}$ servings

C) 32 servings

D) $9\frac{1}{3}$ servings

182) _____

4

3

- 183) A bottle of ketchup has a net weight of 22 ounces. A serving size is $\frac{1}{2}$ ounce. How many servings are in the bottle of ketchup? 183) _____
- A) 11 servings B) 24 servings C) $22\frac{1}{2}$ servings D) 44 servings
- 184) A child's dose of medicine is $\frac{1}{6}$ of a pre-measured dose cup. If the bottle of medicine is the size of 8 dose cups, how many children's doses are there in the bottle? 184) _____
- A) $8\frac{1}{6}$ doses B) 14 doses C) 48 doses D) $1\frac{1}{3}$ dose(s)
- 185) A worker has readings that take $\frac{2}{3}$ minute each to read and record. How many readings can be completed in 36 minutes? 185) _____
- A) 24 readings B) 12 readings C) 14 readings D) 54 readings
- 186) The floor of a rectangular room is to be tiled with $\frac{1}{3}$ - foot square tiles along a 10- foot wall. How many tiles will be needed along the wall? 186) _____
- A) $3\frac{1}{3}$ tiles B) $10\frac{1}{3}$ tiles C) 31 tiles D) 30 tiles
- 187) A piece of cheese weighing $\frac{4}{5}$ pound is to be divided into 6 equal portions. What will be the weight of each portion? 187) _____
- A) $4\frac{4}{5}$ pound(s) B) $\frac{2}{15}$ pound C) $\frac{3}{10}$ pound(s) D) $7\frac{1}{2}$ pounds
- 188) A piece of cable which is $\frac{3}{5}$ m long is to be cut into pieces $\frac{1}{20}$ m long. How many pieces will there be? 188) _____
- A) 12 pieces B) $\frac{1}{12}$ piece C) 100 pieces D) 60 pieces
- 189) The recipe for a chocolate chip cake calls for $\frac{5}{7}$ pound of chocolate chips. If a bakery wants to make 28 cakes, how many pounds of chocolate chips will they need? 189) _____
- A) $5\frac{3}{5}$ pounds B) 4 pounds C) 25 pounds D) 20 pounds

- 190) An upholsterer wants to reupholster 160 chairs for a banquet hall. If each chair needs $\frac{1}{8}$ pound of brass tacks, how many pounds of brass tacks are needed? 190) _____
- A) 1280 pounds B) 2 pounds C) 128 pounds D) 20 pounds

- 191) A mechanic uses on average $\frac{3}{2}$ gallon(s) of gear lube to service each tractor differential. Find the number of tractors that can be serviced with 6 gallons of gear lube. 191) _____
 A) 9 tractors B) 2 tractors C) 18 tractors D) 4 tractors
- 192) A building contractor finds that $\frac{3}{5}$ can of pipe joint compound is needed to plumb each new home. How many homes can be plumbed with 24 cans of compound? 192) _____
 A) 24 homes B) $14\frac{2}{5}$ homes C) 40 homes D) 30 homes
- 193) Joe has traveled $\frac{5}{6}$ of his total trip. If the trip is a total of 678 miles, how many miles has he gone? 193) _____
 A) $282\frac{1}{2}$ miles B) $94\frac{1}{6}$ miles C) 565 miles D) 113 miles
- 194) Susan has been working on a job that will require 63 hours to complete. If she has completed $\frac{6}{7}$ of the job, how many hours has she worked? 194) _____
 A) $7\frac{5}{7}$ hours B) 27 hours C) 9 hours D) 54 hours
- 195) A scarf manufacturer requires $\frac{3}{5}$ yard of fabric for each scarf produced. Find the number of scarves that can be made from 888 yards of fabric. 195) _____
 A) 355 scarves B) 1480 scarves C) 533 scarves D) 2220 scarves
- 196) Each patient will receive $\frac{7}{10}$ vial of medication. How many patients can be treated with 4550 vials of medication? 196) _____
 A) 6500 patients B) 3185 patients C) 650 patients D) 6370 patients

Multiply to find the exact answer. Express the answer as a whole or mixed number when possible and simplify.

- 197) $3\frac{3}{7} \cdot 1\frac{3}{4}$ 197) _____
 A) 6 B) $3\frac{9}{28}$ C) 7 D) 9
- 198) $3\frac{1}{5} \cdot \frac{1}{6}$ 198) _____
 A) 21 B) 24 C) $18\frac{4}{20}$ D) 20
- 199) $6\frac{2}{3} \cdot 3\frac{3}{4}$ 199) _____

A) 16

B) 24

C) 18

D) 25

200) $1\frac{3}{7} \cdot 14$ 200) _____
 A) 98 B) 14 C) 20 D) $15\frac{3}{7}$

201) $5 \cdot \frac{9}{20}$ 201) _____
 A) $11\frac{1}{4}$ B) $32\frac{3}{4}$ C) $32\frac{1}{4}$ D) $30\frac{9}{20}$

202) $5 \cdot \frac{1}{3}$ 202) _____
 A) $15\frac{1}{15}$ B) 15 C) $15\frac{1}{3}$ D) $14\frac{1}{3}$

203) $2\frac{2}{9} \cdot \frac{3}{8}$ 203) _____
 A) $\frac{3}{6}$ B) $2\frac{6}{72}$ C) $\frac{5}{8}$ D) $2\frac{5}{6}$

204) $1\frac{1}{4} \cdot \frac{1}{7} \cdot \frac{4}{5}$ 204) _____
 A) $\frac{1}{35}$ B) $\frac{1}{7}$ C) $\frac{2}{5}$ D) $\frac{2}{7}$

205) $1 \cdot 5 \cdot \frac{2}{9} \cdot \frac{3}{5}$ 205) _____
 A) $2\frac{2}{15}$ B) $3\frac{1}{15}$ C) $3\frac{2}{15}$ D) $2\frac{3}{15}$

206) $4\frac{1}{5} \cdot 1 \cdot \frac{4}{7}$ 206) _____
 A) $4\frac{7}{20}$ B) $4\frac{2}{5}$ C) $5\frac{2}{5}$ D) $2\frac{2}{5}$

Divide to find the exact answer. Express the answer as a whole or mixed number when possible and simplify.

207) $3\frac{5}{7} \div 1\frac{4}{9}$ 207) _____
 A) $2\frac{4}{7}$ B) $2\frac{5}{7}$ C) $2\frac{19}{30}$ D) $2\frac{4}{6}$

208) $2\frac{4}{5} \div 1\frac{5}{7}$ 208) _____
 A) $29\frac{1}{9}$

C) $1\frac{20}{30}$

D) $3\frac{4}{7}$

208) $\underline{\hspace{2cm}}$

D) $1\frac{19}{30}$

$$209) 5\frac{1}{8} \div 2\frac{1}{4}$$

A) $2\frac{5}{18}$

B) $2\frac{5}{17}$

C) $2\frac{6}{18}$

D) $3\frac{5}{18}$

209) _____

$$210) 4\frac{4}{9} \div 3\frac{1}{5}$$

A) $1\frac{8}{18}$

B) $2\frac{7}{18}$

C) $1\frac{7}{18}$

D) $1\frac{7}{17}$

210) _____

$$211) 45 \div 1\frac{1}{2}$$

A) 31

B) 30

C) 29

D) $28\frac{1}{2}$

211) _____

$$212) 3\frac{6}{7} \div 9$$

A) $\frac{3}{6}$

B) $\frac{3}{7}$

C) $\frac{7}{7}$

D) $\frac{7}{4}$

212) _____

$$213) 3\frac{1}{9} \div \frac{4}{9}$$

A) 8

B) $5\frac{1}{2}$

C) 6

D) 7

213) _____

Refer to the following recipe to first estimate the answer and then use multiplication or division to find the exact answer. Simplify.

Old Grandma's Fork Cookies 1¹

$\frac{1}{2}$ cups brown sugar

$1\frac{1}{2}$ cups white sugar 2

$1\frac{1}{4}$ cups shortening

1 pinch salt

3 eggs

$\frac{1}{2}$ tsp soda 2

$2\frac{1}{4}$ tsp cream of tartar

$\frac{1}{2}$ tsp vanilla 2

Cream sugars and shortening. Beat in remaining ingredients. Add flour to stiffen like regular cookie dough. Roll into balls, then flatten with a fork. Cook until brown.

214) If the recipe is tripled, how much soda will be needed? 214) _____

A) Estimate: 9 tbsp

Exact: $7\frac{1}{2}$ tbsp

B) Estimate: 6 tsp

Exact: $6\frac{3}{4}$ tsp

C) Estimate: 9 tsp

Exact: $7\frac{1}{2}$ tsp

D) Estimate: $7\frac{1}{2}$ tsp

Exact: 9 tsp

215) Find the amount of vanilla needed if the recipe is halved. 215) _____

A) Estimate: $\frac{3}{4}$ tsp

Exact: 1 tsp

B) Estimate: $\frac{1}{2}$ tsp

Exact: $1\frac{1}{2}$ tsp

C) Estimate: 2 tsp

Exact: 3 tsp

D) Estimate: 1 tsp

Exact: $\frac{3}{4}$ tsp

216) Find the amount of white sugar needed if you take $2\frac{1}{2}$ times the recipe. 216) _____

A) Estimate: 3 cups

Exact: 3 cups

B) Estimate: 4 cups

Exact: $3\frac{3}{4}$ cups

C) Estimate: $3\frac{3}{4}$ cups

Exact: 5 cups

D) Estimate: 6 cups

Exact: $3\frac{3}{4}$ cups

217) Find the amount of cream of tartar needed if you take $1\frac{1}{2}$ times the recipe.

217) _____

A) Estimate: 4 tsp
Exact: $3\frac{3}{4}$ tsp

B) Estimate: 6 tsp
 $\frac{3}{4}$

Exact: $3\frac{3}{8}$ tsp

C) Estimate: 4 tsp
 $\frac{3}{4}$

D) Estimate: $3\frac{3}{4}$ tsp

Exact: $3\frac{3}{8}$ tsp

Exact: 6 tsp

Solve the problem.

218) A small company sells stock for $8\frac{5}{8}$ dollars per share. How much will 40 shares cost?

218) _____

A) $4\frac{44}{69}$ dollars

B) 345 dollars

C) 40 dollars

D) 45 dollars

219) Tim needs to apply $3\frac{1}{2}$ gallons of herbicide per acre of soybeans. How many gallons of herbicide are needed for 240 acres?

219) _____

A) 840 gallons

B) $180\frac{1}{2}$ gallons

C) $68\frac{4}{7}$ gallons

D) 182 gallons

220) On a certain map, 1 inch equals 28 miles. How many miles are in $5\frac{1}{2}$ inches?

220) _____

A) 37 miles

B) $5\frac{1}{11}$ miles

C) 154 miles

D) $35\frac{1}{2}$ miles

221) A technician has readings that take $1\frac{2}{3}$ minutes each to read and record. How many readings can

221) _____

be completed in 105 minutes?

A) 175 readings

B) 12 readings

C) 63 readings

D) 37 readings

222) The floor of a rectangular room is to be tiled with $\frac{1}{3}$ foot square tiles along a $7\frac{3}{8}$ foot wall. How

222) _____

many tiles will be needed along the wall?

A) $2\frac{11}{24}$ tiles

B) 24 tiles

C) $21\frac{3}{8}$ tiles

D) $22\frac{1}{8}$ tiles

24

8

8

223) Stock in a company is selling for $\$8\frac{1}{4}$ per share. If someone purchased \$693 worth of stock in this

223) _____

company, how many shares did they get?

A) 693 shares

B) 84 shares

C) $277\frac{1}{2}$ shares

D) 2772 shares

224) It requires $1\frac{1}{4}$ cups of concentrate per quart of water to make a certain juice. How many cups are needed to make $7\frac{3}{4}$ quarts of juice? 224) _____

- A) $6\frac{1}{5}$ cups B) 155 cups C) $9\frac{11}{16}$ cups D) $38\frac{3}{4}$ cups

225) A car traveled 249 miles on $8\frac{3}{10}$ gallons of gas. How many miles per gallon did it get? 225) _____

- A) 30 mpg B) 31 C) 31 mpg D) $31\frac{1}{8}$ mpg

Provide an appropriate response.

226) When the numerator is the same as the denominator, for example $\frac{9}{9}$, the fraction is called a(n) _____ fraction. 226) _____

- A) whole B) uncommon C) proper D) improper

227) A proper fraction has the form $\frac{x}{10}$. What is the largest possible number that x can be? 227) _____

- A) 11 B) 5 C) 9 D) 10

228) You are asked to change $16\frac{8}{11}$ to an improper fraction. What should be your first step? 228) _____

- A) Multiply 8 and 16. B) Multiply 11 and 16.
C) Divide 8 by 11. D) Add 16 and 8.

229) You are asked to change $\frac{18}{13}$ to a mixed number. What should be your first step? 229) _____

- A) Divide 18 by 13. B) Multiply 18 and 13.
C) Divide 13 by 18. D) Add 18 and 13.

230) A prime number has exactly _____ factor(s). 230) _____

- A) 0 B) 3 C) 1 D) 2

231) The only consecutive whole numbers that are both prime numbers are _____ and _____. 231) _____

- A) 0 and 1 B) 1 and 2 C) 6 and 7 D) 2 and 3

232) One way to determine if two fractions are equivalent is to use _____. A) simp

lification
C) common factors

B) equivalent terms
D) the method of prime factors

232) _____

233) Multiply two fractions by _____ the numerators and _____ the denominators.

A) adding; multiplying
C) multiplying; multiplying

B) multiplying; adding
D) multiplying; canceling

233) _____

234) Fill in the blank with "always greater than," "sometimes greater than," "always less than," or "cannot be determined," whichever response is correct. When dividing a positive fraction by $\frac{2}{11}$ 234) _____

the answer is _____ the fraction.

- A) cannot be determined
- B) always less than
- C) always greater than
- D) sometimes greater than

235) Finish the statement with a correct response. To divide two fractions one needs to: 235) _____

- A) Use the reciprocal of the second fraction (divisor), add the numerators and multiply the denominators.
- B) Use the reciprocal of the second fraction (divisor) and multiply.
- C) Add the numerators and factor the denominators.
- D) Add the numerators and multiply the denominators.

Answer Key

Testname: UNTITLED2

- 1) B
- 2) B
- 3) D
- 4) A
- 5) C
- 6) A
- 7) A
- 8) B
- 9) B
- 10) D
- 11) C
- 12) D
- 13) B
- 14) D
- 15) A
- 16) D
- 17) B
- 18) B
- 19) C
- 20) A
- 21) D
- 22) C
- 23) D
- 24) B
- 25) A
- 26) D
- 27) C
- 28) C
- 29) A
- 30) C
- 31) C
- 32) D
- 33) A
- 34) B
- 35) D
- 36) B
- 37) C
- 38) D
- 39) A
- 40) A
- 41) B
- 42) A
- 43) B
- 44) A
- 45) B
- 46) C
- 47) D
- 48) D
- 49) B
- 50) A

Answer Key

Testname: UNTITLED2

- 51) A
- 52) D
- 53) C
- 54) D
- 55) D
- 56) A
- 57) C
- 58) B
- 59) B
- 60) B
- 61) B
- 62) A
- 63) B
- 64) A
- 65) B
- 66) D
- 67) B
- 68) A
- 69) C
- 70) A
- 71) D
- 72) B
- 73) C
- 74) C
- 75) A
- 76) A
- 77) A
- 78) C
- 79) B
- 80) B
- 81) A
- 82) A
- 83) C
- 84) B
- 85) B
- 86) A
- 87) B
- 88) D
- 89) D
- 90) A
- 91) B
- 92) A
- 93) A
- 94) B
- 95) A
- 96) D
- 97) B
- 98) D
- 99) C
- 100) A

Answer Key

Testname: UNTITLED2

- 101) B
- 102) B
- 103) A
- 104) A
- 105) B
- 106) C
- 107) C
- 108) B
- 109) C
- 110) C
- 111) A
- 112) C
- 113) D
- 114) B
- 115) B
- 116) D
- 117) A
- 118) D
- 119) A
- 120) C
- 121) C
- 122) B
- 123) A
- 124) D
- 125) C
- 126) D
- 127) A
- 128) D
- 129) A
- 130) D
- 131) B
- 132) B
- 133) C
- 134) A
- 135) C
- 136) A
- 137) A
- 138) A
- 139) A
- 140) D
- 141) A
- 142) A
- 143) B
- 144) C
- 145) D
- 146) D
- 147) A
- 148) B
- 149) C
- 150) A

Answer Key

Testname: UNTITLED2

- 151) C
- 152) A
- 153) D
- 154) D
- 155) A
- 156) D
- 157) C
- 158) C
- 159) A
- 160) A
- 161) A
- 162) B
- 163) A
- 164) A
- 165) C
- 166) C
- 167) B
- 168) A
- 169) A
- 170) A
- 171) C
- 172) B
- 173) D
- 174) B
- 175) A
- 176) C
- 177) A
- 178) D
- 179) A
- 180) A
- 181) A
- 182) C
- 183) D
- 184) C
- 185) D
- 186) D
- 187) B
- 188) A
- 189) D
- 190) D
- 191) D
- 192) C
- 193) C
- 194) D
- 195) B
- 196) A
- 197) A
- 198) D
- 199) D
- 200) C

Answer Key

Testname: UNTITLED2

- 201) C
- 202) C
- 203) C
- 204) B
- 205) C
- 206) D
- 207) A
- 208) D
- 209) A
- 210) C
- 211) B
- 212) B
- 213) D
- 214) C
- 215) D
- 216) D
- 217) C
- 218) B
- 219) A
- 220) C
- 221) C
- 222) D
- 223) B
- 224) C
- 225) A
- 226) D
- 227) C
- 228) B
- 229) A
- 230) D
- 231) D
- 232) D
- 233) C
- 234) C
- 235) B