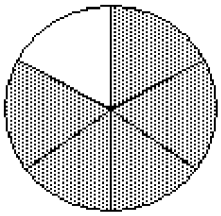
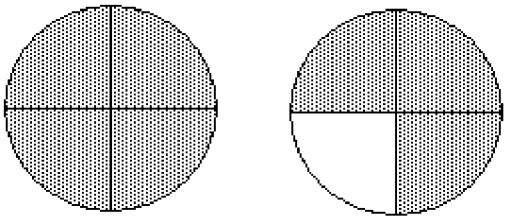
MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

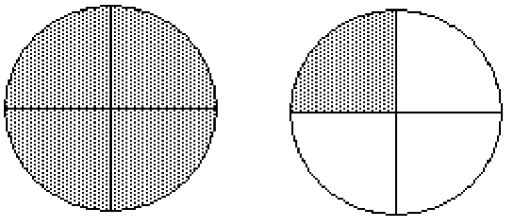
Write fractions to represent the shaded and unshaded portions of the figure.

1)  1) _____

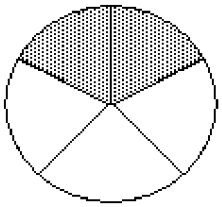
A) $\frac{5}{1}, \frac{5}{4}$ B) $\frac{5}{6}, \frac{1}{6}$ C) $\frac{1}{6}, \frac{5}{6}$ D) $\frac{1}{5}, \frac{4}{5}$

2)  2) _____

A) $\frac{1}{7}, \frac{6}{7}$ B) $\frac{7}{4}, \frac{1}{4}$ C) $\frac{3}{4}, \frac{1}{4}$ D) $\frac{7}{8}, \frac{1}{8}$

3)  3) _____

A) $\frac{3}{5}, \frac{5}{5}$ B) $\frac{5}{4}, \frac{3}{4}$ C) $\frac{5}{3}, \frac{3}{3}$ D) $\frac{5}{8}, \frac{3}{8}$

4)  4) _____

A) $\frac{5}{2}, \frac{5}{3}$ B) $\frac{2}{5}, \frac{3}{5}$ C) $\frac{3}{2}, \frac{1}{2}$ D) $\frac{2}{3}, \frac{1}{3}$

5) 5) _____

A) $\frac{3}{1}, \frac{3}{2}$ B) $\frac{1}{3}, \frac{2}{3}$ C) $\frac{1}{4}, \frac{3}{4}$ D) $\frac{3}{4}, \frac{1}{4}$

6) 6) _____

A) $\frac{3}{5}, \frac{2}{5}$ B) $\frac{3}{8}, \frac{5}{8}$ C) $\frac{5}{3}, \frac{5}{2}$ D) $\frac{5}{8}, \frac{3}{8}$

7) 7) _____

A) $\frac{5}{6}, \frac{1}{6}$ B) $\frac{5}{3}, \frac{1}{3}$ C) $\frac{5}{1}, \frac{1}{1}$ D) $\frac{1}{5}, \frac{1}{1}$

8) 8) _____

A) $\frac{1}{7}, \frac{4}{1}$ B) $\frac{7}{1}, \frac{1}{4}$ C) $\frac{7}{4}, \frac{1}{4}$ D) $\frac{7}{8}, \frac{1}{8}$

9) 9) _____

A) $\frac{11}{1}, \frac{1}{12}$ B) $\frac{11}{12}, \frac{1}{12}$ C) $\frac{1}{11}, \frac{12}{1}$ D) $\frac{11}{6}, \frac{1}{6}$

10) 10) _____

A) $\frac{3}{8}, \frac{5}{8}$ B) $\frac{3}{5}, \frac{2}{5}$ C) $\frac{5}{3}, \frac{1}{3}$ D) $\frac{5}{8}, \frac{3}{8}$

Solve the problem.

11) Of 19 crates of apples, 2 crates are Granny Smiths. What fraction of the crates are Granny Smiths? 11) _____

A) $\frac{2}{19}$ B) $\frac{19}{2}$ C) $\frac{19}{17}$ D) $\frac{17}{19}$

12) Of 19 crates of apples, 2 crates are Granny Smiths. What fraction of the crates are not Granny Smiths? 12) _____

A) $\frac{17}{19}$ B) $\frac{2}{19}$ C) $\frac{19}{17}$ D) $\frac{19}{2}$

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) $\frac{7}{10}$ B) $\frac{10}{7}$ C) $\frac{10}{3}$ D) $\frac{3}{10}$

14) A high school basketball team has 9 members. If 7 of the team members are juniors and the rest are seniors, find the fraction of the team members that are seniors. 14) _____

A) $\frac{9}{2}$ B) $\frac{9}{7}$ C) $\frac{7}{9}$ D) $\frac{2}{9}$

15) In a microbiology class of 41 students, 17 students are graduate students. What fraction of the students are graduate students? 15) _____

A) $\frac{41}{17}$ B) $\frac{17}{41}$ C) $\frac{24}{41}$ D) $\frac{41}{24}$

16) In a microbiology class of 29 students, 13 students are graduate students. What fraction of the students are not graduate students? 16) _____

A) $\frac{16}{29}$ B) $\frac{29}{16}$ C) $\frac{29}{13}$ D) $\frac{13}{29}$

17) Of 88 bicycles in a bike rack, 41 are mountain bikes. What fraction of the bicycles are mountain bikes? 17) _____

A) $\frac{88}{47}$ B) $\frac{88}{41}$ C) $\frac{41}{88}$ D) $\frac{47}{88}$

18) Of 94 bicycles in a bike rack, 41 are mountain bikes. What fraction of the bicycles are not mountain bikes? 18) _____

A) $\frac{94}{41}$ B) $\frac{41}{94}$ C) $\frac{53}{94}$ D) $\frac{94}{53}$

19) Of 206 trees in the park, 43 are coniferous trees. What fraction of the trees are coniferous trees? 19) _____

A) $\frac{43}{206}$ B) $\frac{206}{43}$ C) $\frac{163}{206}$ D) $\frac{206}{163}$

20) Of 176 trees in the park, 13 are coniferous trees. What fraction of the trees are not coniferous trees? 20) _____

A) $\frac{13}{176}$ B) $\frac{176}{163}$ C) $\frac{163}{176}$ D) $\frac{176}{13}$

Identify the numerator and denominator.

21) $\frac{3}{2}$ 21) _____

A) Numerator 2
Denominator 3

B) Numerator 5
Denominator 1

C) Numerator 3
Denominator 2

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

22) $\frac{19}{2}$ 22) _____

A) Numerator 1
Denominator $\frac{2}{19}$

B) Numerator 19
Denominator 2

C) Numerator 2
Denominator 19

D) Numerator $\frac{19}{2}$
Denominator 1

List the proper fractions in the group.

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

A) $\frac{9}{7}$

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

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

D) $\frac{9}{7}, \frac{13}{17}$

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

A) $\frac{1}{4}, \frac{5}{4}, \frac{8}{3}$

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

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

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

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

A) $\frac{7}{12}, \frac{3}{4}$

B) $\frac{7}{12}, \frac{11}{4}, \frac{3}{4}$

C) $\frac{7}{2}, \frac{11}{4}, \frac{3}{4}$

D) $\frac{14}{13}, \frac{7}{2}, \frac{11}{4}$

26) $\frac{16}{13}, \frac{13}{12}, \frac{11}{8}, \frac{17}{17}, \frac{2}{3}$ 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) $\frac{7}{7}$

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

C) $\frac{5}{19}, \frac{7}{7}, \frac{2}{11}$

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

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

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

B) $\frac{9}{7}, \frac{19}{12}$

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

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

List the improper fractions in the group.

29) $\frac{14}{6}, \frac{5}{36}, \frac{7}{8}, \frac{46}{30}, \frac{39}{39}$ 29) _____

A) $\frac{14}{6}, \frac{5}{36}, \frac{7}{8}, \frac{39}{39}$

B) $\frac{14}{6}, \frac{5}{36}, \frac{7}{8}, \frac{46}{30}, \frac{39}{39}$

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

D) $\frac{14}{6}, \frac{46}{30}, \frac{39}{39}$

30) $\frac{10}{8}, \frac{2}{26}, \frac{3}{9}, \frac{40}{16}, \frac{57}{57}$ 30) _____

A) $\frac{10}{8}, \frac{2}{26}, \frac{3}{9}, \frac{57}{57}$

B) $\frac{2}{26}, \frac{3}{9}$

C) $\frac{10}{8}, \frac{40}{16}, \frac{57}{57}$

D) $\frac{10}{8}, \frac{2}{26}, \frac{3}{9}, \frac{40}{16}, \frac{57}{57}$

31) $\frac{31}{8}, \frac{9}{48}, \frac{5}{6}, \frac{22}{17}, \frac{20}{20}$ 31) _____

A) $\frac{31}{8}, \frac{22}{17}, \frac{20}{20}$

B) $\frac{9}{48}, \frac{5}{6}$

C) $\frac{31}{8}, \frac{9}{48}, \frac{5}{6}, \frac{22}{17}, \frac{20}{20}$

D) $\frac{31}{8}, \frac{9}{48}, \frac{5}{6}, \frac{20}{20}$

32) $\frac{45}{6}, \frac{3}{49}, \frac{8}{9}, \frac{22}{20}, \frac{49}{49}$ 32) _____

A) $\frac{45}{6}, \frac{3}{49}, \frac{8}{9}, \frac{22}{20}, \frac{49}{49}$

B) $\frac{3}{49}, \frac{8}{9}$

C) $\frac{45}{6}, \frac{22}{20}, \frac{49}{49}$

D) $\frac{45}{6}, \frac{3}{49}, \frac{8}{9}, \frac{49}{49}$

33) $\frac{55}{6}, \frac{3}{42}, \frac{6}{9}, \frac{48}{37}, \frac{56}{56}$ 33) _____

A) $\frac{55}{6}, \frac{3}{42}, \frac{6}{9}, \frac{48}{37}, \frac{56}{56}$ B) $\frac{3}{42}, \frac{6}{9}$

C) $\frac{55}{6}, \frac{48}{37}, \frac{56}{56}$ D) $\frac{55}{6}, \frac{3}{42}, \frac{6}{9}, \frac{56}{56}$

34) $\frac{14}{5}, \frac{9}{31}, \frac{5}{7}, \frac{44}{21}, \frac{36}{36}$ 34) _____

A) $\frac{14}{5}, \frac{9}{31}, \frac{5}{7}, \frac{36}{36}$ B) $\frac{14}{5}, \frac{9}{31}, \frac{5}{7}, \frac{44}{21}, \frac{36}{36}$

C) $\frac{14}{5}, \frac{44}{21}, \frac{36}{36}$ D) $\frac{9}{31}, \frac{5}{7}$

Fill in the blanks to complete the sentence.

35) The fraction $\frac{11}{47}$ represents ____ of the ____ equal parts into which a whole is divided. 35) _____

A) $\frac{11}{47}, 47$ B) $47, 11$ C) $\frac{11}{47}, 11$ D) $11, 47$

Write the mixed number as an improper fraction.

36) $3\frac{7}{9}$ 36) _____

A) $\frac{27}{9}$ B) $\frac{34}{7}$ C) $\frac{27}{7}$ D) $\frac{34}{9}$

37) $2\frac{7}{8}$ 37) _____

A) $\frac{23}{7}$ B) $\frac{23}{8}$ C) $\frac{16}{8}$ D) $\frac{16}{7}$

38) $7\frac{2}{7}$ 38) _____

A) $\frac{49}{7}$ B) $\frac{51}{7}$ C) $\frac{51}{2}$ D) $\frac{49}{2}$

39) $5\frac{3}{7}$ 39) _____

A) $\frac{38}{7}$ B) $\frac{35}{7}$ C) $\frac{35}{3}$ D) $\frac{38}{3}$

40) $12\frac{7}{10}$ 40) _____

A) $\frac{127}{10}$ B) $\frac{137}{10}$ C) $\frac{84}{10}$ D) $\frac{19}{10}$

41) $21\frac{2}{3}$ 41) _____

A) 35 B) $\frac{65}{3}$ C) 294 D) 14

Write the improper fraction as a whole or mixed number.

42) $\frac{20}{3}$ 42) _____

A) $\frac{2}{3}$ B) $7\frac{2}{3}$ C) $5\frac{2}{7}$ D) $6\frac{2}{3}$

43) $\frac{45}{4}$ 43) _____

A) $10\frac{1}{4}$ B) $11\frac{1}{4}$ C) $12\frac{1}{4}$ D) $11\frac{1}{7}$

44) $\frac{37}{5}$ 44) _____

A) $6\frac{2}{5}$ B) $7\frac{2}{7}$ C) $8\frac{2}{5}$ D) $7\frac{2}{5}$

45) $\frac{37}{6}$ 45) _____

A) $5\frac{1}{6}$ B) $6\frac{1}{7}$ C) $6\frac{1}{6}$ D) $7\frac{1}{6}$

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

A) $5\frac{6}{7}$ B) $4\frac{6}{8}$ C) $5\frac{6}{8}$ D) $6\frac{6}{8}$

47) $\frac{154}{7}$ 47) _____

A) 22 B) $\frac{22}{2}$ C) 155 D) 153

48) $\frac{195}{7}$ 48) _____

A) $195\frac{195}{7}$ B) $27\frac{6}{7}$ C) $195\frac{7}{195}$ D) $\frac{7}{195}$

49) $\frac{967}{5}$ 49) _____

A) $2901\frac{967}{5}$ B) $\frac{5}{967}$ C) $2901\frac{5}{967}$ D) $193\frac{2}{5}$

50) $\frac{2338}{14}$ 50) _____

A) 167 B) 2337 C) $\frac{167}{2}$ D) 2339

Find all the factors for the number.

51) 30 51) _____

A) 1, 2, 3, 5, 6, 10, 15, 30 B) 1, 2, 3, 5, 6, 10, 20, 30

C) 1, 5, 6, 30 D) 5, 6, 10, 30

52) 28 52) _____

A) 2, 7, 14, 28 B) 1, 2, 7, 14, 28

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

53) 36 53) _____

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

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

54) 45 54) _____

A) 1, 3, 5, 9, 15, 30, 45 B) 1, 2, 3, 5, 9, 15, 30, 45

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

55) 56 55) _____

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

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

56) 63 56) _____

A) 3, 5, 7, 9, 11, 21, 63 B) 1, 2, 3, 7, 9, 21, 36, 63

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

57) 66 57) _____

A) 1, 2, 3, 4, 11, 16, 22, 33, 66 B) 1, 2, 3, 9, 11, 22, 33, 66

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

58) 70 58) _____

A) 1, 3, 5, 7, 9, 15, 20, 35, 70 B) 1, 2, 5, 7, 35, 70

C) 1, 2, 5, 7, 10, 14, 35, 70 D) 1, 2, 3, 5, 7, 9, 15, 35, 70

59) 72 59) _____

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

C) 1, 2, 3, 4, 6, 9, 12, 14, 18, 24, 36, 72 D) 1, 2, 3, 4, 5, 6, 7, 8, 9, 12, 18, 24, 36, 72

60) 84 60) _____

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

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

Decide whether the number is prime or composite.

61) 44 61) _____

A) Prime B) Composite

62) 97 62) _____

A) Prime B) Composite

63) 84 63) _____

A) Prime B) Composite

64) 11 64) _____

A) Prime B) Composite

65) 9 65) _____

A) Prime B) Composite

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

66) 63 66) _____

A) 7^2 B) $9 \cdot 7$ C) $9 \cdot 3$ D) $3^2 \cdot 7$

67) 134 67) _____

A) $2^2 \cdot 67$ B) 2^2 C) $2 \cdot 65$ D) $2 \cdot 67$

68) 448 68) _____

A) $2^6 \cdot 5$ B) $2^5 \cdot 7$ C) $2^6 \cdot 7$ D) $2^5 \cdot 11$

69) 6 69) _____

A) $2^2 \cdot 3^2$ B) $2^2 \cdot 3$ C) $2 \cdot 3$ D) $2 \cdot 3^2$

70) 110 70) _____

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

71) 350 71) _____

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

72) 612 72) _____

A) $2^3 \cdot 3^2 \cdot 17$ B) $3^4 \cdot 17$ C) $2^2 \cdot 3^2 \cdot 17$ D) $2^4 \cdot 17$

73) 7425 73) _____

A) $3^3 \cdot 5^3 \cdot 11$ B) $3 \cdot 5^4 \cdot 11$ C) $3^4 \cdot 5 \cdot 11$ D) $3^3 \cdot 5^2 \cdot 11$

74) 4400 74) _____

A) $2^3 \cdot 5^2 \cdot 11$ B) $2^4 \cdot 5^2 \cdot 13$ C) $2^4 \cdot 5 \cdot 11$ D) $2^4 \cdot 5^2 \cdot 11$

75) 4680 75) _____

A) $2^3 \cdot 3^2 \cdot 5 \cdot 11$ B) $2^3 \cdot 3^2 \cdot 13$ C) $2^2 \cdot 3^3 \cdot 5 \cdot 13$ D) $2^3 \cdot 3^2 \cdot 5 \cdot 13$

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

76) 30 76) _____

A) 2, 3, 5, 6 B) 2, 3, 5, 10 C) 2, 3, 5, 6, 10 D) 2, 3, 5

77) 14,200 77) _____

A) 2, 5, 8, 10 B) 2, 4, 5, 8 C) 2, 5, 4, 8, 10 D) 2, 4, 5

78) 191 78) _____

A) 3, 7 B) None C) 3 D) 3, 5

79) 3139 79) _____

A) 3 B) 3, 7 C) 3, 5 D) None

80) 174,511 80) _____

A) 3, 7 B) 3 C) None D) 3, 5

81) 1634 81) _____

A) 4 B) 2 C) 2, 3, 4 D) 3, 4

82) 2442 82) _____

A) 2, 3, 4 B) 4, 5, 6 C) 3, 4, 6 D) 2, 3, 6

83) 1705 83) _____

A) 2, 5, 10 B) 10 C) 5 D) 5, 10

84) 1311 84) _____

A) 3 B) 9 C) 3, 9 D) 2, 3, 9

85) 42,340 85) _____

A) 4, 5, 10 B) 4, 5 C) 2, 4, 5, 10 D) 2, 5

Write the fraction in lowest terms.

86) $\frac{6}{8}$ 86) _____

A) $\frac{3}{4}$ B) $\frac{6}{4}$ C) $\frac{4}{3}$ D) $\frac{3}{8}$

87) $\frac{3}{15}$ 87) _____

A) $\frac{1}{15}$ B) $\frac{2}{6}$ C) $\frac{1}{5}$ D) $\frac{2}{10}$

88) $\frac{30}{35}$ 88) _____

A) $\frac{30}{35}$ B) $\frac{6}{7}$ C) $\frac{5}{7}$ D) $\frac{6}{5}$

89) $\frac{55}{77}$ 89) _____

A) $\frac{5}{11}$ B) $\frac{11}{7}$ C) $\frac{5}{7}$ D) $\frac{55}{77}$

90) $\frac{15}{47}$ 90) _____

A) $\frac{23}{7}$ B) $\frac{7}{23}$ C) $\frac{1}{47}$ D) $\frac{15}{47}$

91) $\frac{70}{90}$ 91) _____

A) $\frac{10}{9}$ B) $\frac{7}{9}$ C) $\frac{7}{10}$ D) $\frac{70}{90}$

92) $\frac{48}{57}$ 92) _____

A) $\frac{48}{57}$ B) $\frac{16}{19}$ C) $\frac{3}{19}$ D) $\frac{16}{3}$

93) $\frac{100}{140}$ 93) _____

A) $\frac{5}{20}$ B) $\frac{5}{7}$ C) $\frac{100}{140}$ D) $\frac{20}{7}$

94) $\frac{247}{342}$ 94) _____

A) $\frac{247}{342}$ B) $\frac{13}{19}$ C) $\frac{19}{18}$ D) $\frac{13}{18}$

95) $\frac{820}{20}$ 95) _____

A) $\frac{1}{41}$ B) 42 C) $\frac{820}{20}$ D) 41

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) $\frac{12}{16}$ 96) _____

A) $\frac{2 \cdot 2 \cdot 3}{2 \cdot 2 \cdot 2} = \frac{3}{2}$ B) $\frac{2 \cdot 2 \cdot 3}{2 \cdot 2 \cdot 2 \cdot 2} = \frac{3}{4}$ C) $\frac{2 \cdot 2 \cdot 3}{2 \cdot 2 \cdot 2 \cdot 2} = \frac{3}{2}$ D) $\frac{2 \cdot 3}{2 \cdot 2 \cdot 2} = \frac{3}{4}$

97) $\frac{35}{56}$ 97) _____

A) $\frac{2 \cdot 5 \cdot 7}{2 \cdot 2 \cdot 2 \cdot 7} = \frac{5}{14}$ B) $\frac{5 \cdot 7}{2 \cdot 2 \cdot 2 \cdot 7} = \frac{5}{8}$

C) $\frac{3 \cdot 7}{2 \cdot 2 \cdot 7} = \frac{21}{8}$ D) $\frac{2 \cdot 2 \cdot 2 \cdot 7}{2 \cdot 5 \cdot 7} = \frac{14}{5}$

98) $\frac{40}{84}$ 98) _____

A) $\frac{2 \cdot 2 \cdot 5 \cdot 5}{2 \cdot 2 \cdot 3 \cdot 7} = \frac{25}{21}$

B) $\frac{2 \cdot 2 \cdot 2 \cdot 5}{2 \cdot 2 \cdot 3 \cdot 7} = \frac{10}{21}$

C) $\frac{2 \cdot 2 \cdot 2 \cdot 5}{2 \cdot 2 \cdot 2 \cdot 7} = \frac{5}{3}$

D) $\frac{2 \cdot 2 \cdot 5}{2 \cdot 3 \cdot 7} = \frac{10}{21}$

99) $\frac{320}{156}$ 99) _____

A) $\frac{2 \cdot 3 \cdot 2 \cdot 5}{13} = \frac{80}{39}$

B) $\frac{2 \cdot 2 \cdot 2 \cdot 2 \cdot 2 \cdot 2 \cdot 5}{2 \cdot 2 \cdot 3 \cdot 13} = \frac{320}{156}$

C) $\frac{2 \cdot 2 \cdot 2 \cdot 2 \cdot 2 \cdot 2 \cdot 5}{2 \cdot 2 \cdot 3 \cdot 13} = \frac{80}{39}$

D) $\frac{2 \cdot 2 \cdot 2 \cdot 2 \cdot 2 \cdot 5}{2 \cdot 3 \cdot 13} = \frac{80}{39}$

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

100) $\frac{5}{8}$ and $\frac{100}{160}$ 100) _____

A) Equivalent B) Not equivalent

101) $\frac{1}{6}$ and $\frac{5}{12}$ 101) _____

A) Equivalent B) Not equivalent

102) $\frac{3}{7}$ and $\frac{19}{23}$ 102) _____

A) Equivalent B) Not equivalent

103) $\frac{1}{3}$ and $\frac{18}{54}$ 103) _____

A) Equivalent B) Not equivalent

104) $\frac{10}{25}$ and $\frac{8}{20}$ 104) _____

A) Equivalent B) Not equivalent

105) $\frac{45}{55}$ and $\frac{54}{77}$ 105) _____

A) Equivalent B) Not Equivalent

Multiply. Write the answer in lowest terms.

106) $\frac{3}{4} \cdot \frac{1}{3}$ 106) _____

A) $\frac{3}{7}$ B) $\frac{1}{4}$ C) $\frac{4}{7}$ D) $\frac{3}{12}$

107) $\frac{1}{4} \cdot \frac{2}{3}$ 107) _____

A) $\frac{3}{7}$ B) $\frac{2}{5}$ C) $\frac{1}{6}$ D) $\frac{2}{12}$

108) $\frac{2}{5} \cdot \frac{4}{9}$ 108) _____

A) $\frac{10}{9}$ B) $\frac{45}{8}$ C) $\frac{8}{45}$ D) $\frac{3}{7}$

109) $\frac{1}{2} \cdot \frac{1}{9}$ 109) _____

A) 18 B) $\frac{2}{9}$ C) $\frac{2}{11}$ D) $\frac{1}{18}$

110) $\frac{3}{5} \cdot \frac{12}{29}$ 110) _____

A) $\frac{36}{145}$ B) $\frac{29}{20}$ C) $\frac{20}{29}$ D) $\frac{36}{5}$

111) $\frac{2}{3} \cdot \frac{4}{7} \cdot \frac{5}{6}$ 111) _____

A) $\frac{5}{4}$ B) $\frac{35}{36}$ C) $\frac{8}{63}$ D) $\frac{20}{63}$

112) $\frac{3}{5} \cdot \frac{1}{2} \cdot \frac{3}{8}$ 112) _____

A) $\frac{4}{5}$ B) $\frac{9}{80}$ C) $\frac{9}{10}$ D) $\frac{9}{40}$

113) $\frac{12}{25} \cdot \frac{40}{66} \cdot \frac{15}{32}$ 113) _____

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

114) $\frac{48}{64} \cdot \frac{16}{27} \cdot \frac{45}{24}$ 114) _____

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

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

115) $27 \cdot \frac{2}{9}$ 115) _____

A) 6 B) 3 C) 8 D) $10\frac{11}{72}$

116) $15 \cdot \frac{7}{9}$ 116) _____

A) $\frac{7}{27}$ B) $11\frac{2}{3}$ C) 7 D) 35

117) $280 \cdot \frac{1}{7}$ 117) _____

A) 4 B) 40 C) $\frac{1}{7}$ D) $\frac{280}{7}$

118) $350 \cdot \frac{2}{5}$ 118) _____

A) 350 B) 140 C) 300 D) 120

119) $\frac{2}{3} \cdot 111$ 119) _____

A) 111 B) 74 C) 76 D) $55\frac{1}{2}$

120) $\frac{1}{5} \cdot 149$ 120) _____

A) 149 B) $29\frac{4}{5}$ C) $\frac{1}{745}$ D) $\frac{1}{5}$

121) $50 \cdot \frac{3}{10} \cdot \frac{5}{21}$ 121) _____

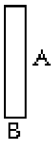
A) 75 B) $3\frac{4}{7}$ C) $\frac{7}{25}$ D) $\frac{5}{14}$

122) $\frac{78}{66} \cdot 308 \cdot \frac{2}{14}$ 122) _____

A) 52 B) 48 C) $57\frac{1}{5}$ D) $52\frac{4}{5}$

Find the area of the rectangle.

123) 123) _____

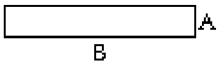


A = $\frac{4}{9}$ foot

B = $\frac{1}{2}$ foot

A) $\frac{2}{9}$ square foot B) $\frac{4}{11}$ square foot C) $\frac{4}{18}$ square foot D) $\frac{5}{11}$ square foot

124) 124) _____

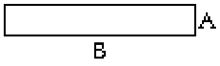


A = $\frac{2}{7}$ in.

B = 7 in.

A) $\frac{14}{7}$ in.^{2} B) $\frac{51}{7}$ in.^{2} C) $\frac{9}{7}$ in.^{2} D) 2 in.^{2}

125) 125) _____



A = $\frac{7}{24}$ mi

B = $\frac{16}{9}$ mi

A) $\frac{23}{33}$ mi^2 B) $\frac{14}{27}$ mi^2 C) $\frac{5}{7}$ mi^2 D) $\frac{112}{216}$ mi^2

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 24 feet and a width of $\frac{7}{9}$ foot. 126) _____

A) 7 ft^2 B) $\frac{7}{27}$ ft^2 C) $18\frac{2}{3}$ ft^2 D) 56 ft^2

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

A) $3\frac{3}{4}$ ft^2 B) $\frac{1}{11}$ ft^2 C) 11 ft^2 D) $7\frac{1}{2}$ ft^2

128) A rectangular parking lot measures $\frac{3}{14}$ mile by $\frac{2}{9}$ mile. Find the area of the parking lot. 128) _____

A) $\frac{1}{21}$ mi^2 B) $\frac{5}{23}$ mi^2 C) $\frac{2}{63}$ mi^2 D) $\frac{5}{126}$ mi^2

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

Which cake has the larger area?

A) Layer Cake B B) Layer Cake A

Solve the problem.

130) A rectangular parking lot measures $\frac{3}{8}$ mile by $\frac{2}{9}$ mile. Find the area of the parking lot. 130) _____

A) $\frac{5}{72}$ mi^2 B) $\frac{1}{12}$ mi^2 C) $\frac{5}{17}$ mi^2 D) $\frac{1}{18}$ mi^2

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) $\frac{4}{55}$ ft^2 C) 8 ft^2 D) $13\frac{3}{4}$ ft^2

132) A rectangular sheet of paper measures $\frac{1}{3}$ foot by $\frac{2}{7}$ foot. Find its area. 132) _____

A) $\frac{2}{21}$ ft^2 B) $\frac{1}{7}$ ft^2 C) $\frac{3}{7}$ ft^2 D) $\frac{3}{10}$ ft^2

133) A rectangular dog bed is $\frac{2}{5}$ yard by $\frac{4}{7}$ yard. Find its area. 133) _____

A) $\frac{8}{35}$ yd^2 B) $\frac{6}{7}$ yd^2 C) $\frac{1}{2}$ yd^2 D) $\frac{6}{35}$ yd^2

134) A warehouse stores 1575 different inventory items, of which $\frac{3}{25}$ are perishable. How many of the inventory items are perishable? 134) _____

A) 186 items B) 189 items C) 194 items D) 787 items

135) Mr. and Mrs. Jones have a home equity loan of $18,200. They have paid off $\frac{8}{14}$ of the loan. How much of the loan have they paid off? 135) _____

A) $9600 B) $10400 C) $11200 D) $1300

136) During elections at the local union, $\frac{3}{24}$ of the members voted. If there are 120 members, how many voted? 136) _____

A) 15 members B) 18 members C) 5 members D) 12 members

137) A restaurant has a capacity of 266 patrons. If the restaurant is $\frac{3}{19}$ full, how many patrons are at the restaurant? 137) _____

A) 45 patrons B) 14 patrons C) 39 patrons D) 42 patrons

138) Rich can machine 32 units in 8 hours. How many units can he machine in 4 hours? 138) _____

A) 1 unit(s) B) 16 units C) 4 units D) 128 units

139) Karen 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 of the withholdings are for taxes. What fraction of Mary's earned income is deducted for taxes? 140) _____

A) $\frac{1}{5}$ B) $\frac{3}{20}$ C) $\frac{4}{9}$ D) $\frac{4}{15}$

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) $\frac{2}{25}$ C) $\frac{4}{15}$ D) $\frac{2}{3}$

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) _____

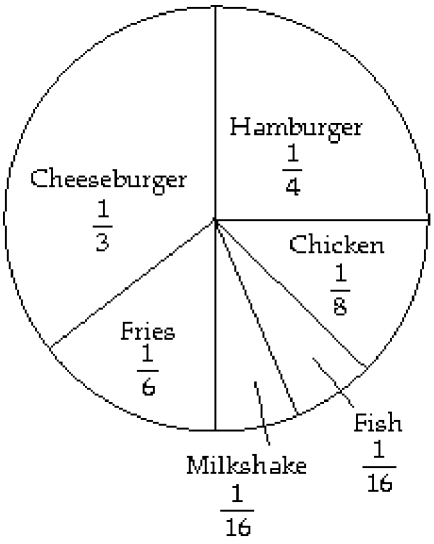
A) $\frac{1}{4}$ B) $\frac{3}{5}$ C) $\frac{2}{15}$ D) $\frac{1}{15}$

143) A certain scholarship will pay for $\frac{3}{8}$ of a student's total tuition. How much will a student who receives this scholarship pay toward tuition, if tuition is $800? 143) _____

A) $794 B) $500 C) $300 D) $750

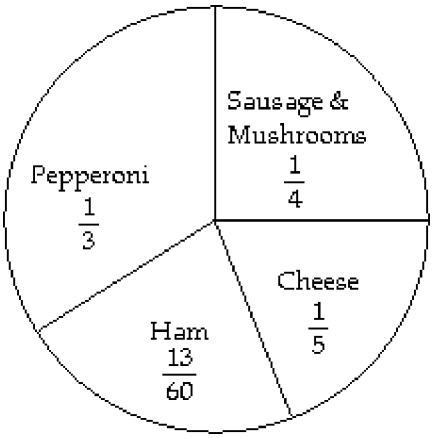
Use the circle graph to answer the question.

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 chicken was eaten. 144) _____



A) 144 times B) 4608 times C) 72 times D) 192 times

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



A) 48 pizzas B) 60 pizzas C) 80 pizzas D) 56 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) $11,000 B) $12,150 C) $13,000 D) $9,200

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

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

148) If the family paid $\frac{9}{50}$ of their total income in taxes for the year, how much was paid in taxes? 148) _____

A) $3780 B) $4527 C) $4860 D) $5328

149) If $\frac{1}{10}$ of the family's total income was spent on clothing, how much was spent for clothing last year? 149) _____

A) $2700 B) $2900 C) $2515 D) $2400

150) The family saved $\frac{9}{100}$ of their total income each month. How much savings did they have at the end of June? 150) _____

A) $1170 B) $1044 C) $828 D) $1093.50

151) The family saved $\frac{4}{25}$ of their total income each month. How much savings did they have at the end of the year? 151) _____

A) $4320 B) $4736 C) $3360 D) $4024

152) The family used $\frac{11}{100}$ of their income for food purchases. How much did they spend on food purchases for the year? 152) _____

A) $2310 B) $2970 C) $2766.50 D) $3256

153) The family used $\frac{17}{100}$ of their income on rent payments. How much did they spend on rent for the year? 153) _____

A) $5032 B) $4590 C) $3570 D) $4275.50

154) If $\frac{1}{4}$ of the family income is spent on entertainment, how much did they spend for entertainment last year? 154) _____

A) $6750 B) $7400 C) $5250 D) $6287.50

155) Other expenses account for $\frac{7}{50}$ of the family income. How much was spent last year on other expenses? 155) _____

A) $2940 B) $2800 C) $3521 D) $3864

Find the reciprocal.

156) $\frac{8}{17}$ 156) _____

A) $\frac{1}{8}$ B) $\frac{8}{17}$ C) $\frac{17}{8}$ D) 17

157) $\frac{1}{12}$ 157) _____

A) $\frac{1}{12}$ B) 1 C) 12 D) No reciprocal

158) 5 158) _____

A) $\frac{1}{5}$ B) 5 C) 1 D) No reciprocal

159) $\frac{14}{11}$ 159) _____

A) $\frac{1}{11}$ B) $\frac{11}{14}$ C) $\frac{1}{14}$ D) 11

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

160) $\frac{3}{4} \div \frac{4}{5}$ 160) _____

A) $\frac{3}{5}$ B) 12 C) $\frac{1}{12}$ D) $\frac{15}{16}$

161) $\frac{1}{3} \div \frac{7}{5}$ 161) _____

A) $\frac{1}{7}$ B) $1\frac{2}{3}$ C) $\frac{5}{21}$ D) $4\frac{1}{5}$

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

A) $1\frac{1}{5}$ B) $\frac{1}{5}$ C) 5 D) $\frac{5}{6}$

163) $\frac{3}{8} \div \frac{3}{4}$ 163) _____

A) $\frac{1}{2}$ B) $\frac{3}{32}$ C) $10\frac{2}{3}$ D) 2

164) $\frac{2}{5} \div \frac{5}{8}$ 164) _____

A) $1\frac{9}{16}$ B) $\frac{16}{25}$ C) $\frac{1}{4}$ D) 4

165) $\frac{4}{7} \div \frac{8}{5}$ 165) _____

A) $\frac{32}{35}$ B) $1\frac{3}{32}$ C) $2\frac{4}{5}$ D) $\frac{5}{14}$

166) $\frac{5}{3} \div \frac{1}{3}$ 166) _____

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

167) $\frac{5}{13} \div \frac{30}{91}$ 167) _____

A) $\frac{6}{7}$ B) $5\frac{5}{6}$ C) $1\frac{1}{6}$ D) $\frac{150}{1183}$

168) $\dfrac{\frac{3}{4}}{\frac{1}{3}}$ 168) _____

A) $\frac{1}{4}$ B) $\frac{3}{4}$ C) $2\frac{1}{4}$ D) $\frac{7}{11}$

169) $\dfrac{\frac{5}{12}}{\frac{5}{18}}$ 169) _____

A) $1\frac{1}{2}$ B) $\frac{25}{216}$ C) $\frac{2}{3}$ D) $7\frac{1}{2}$

170) $15 \div \frac{3}{7}$ 170) _____

A) 5 B) 35 C) $6\frac{3}{7}$ D) $\frac{1}{35}$

171) $6 \div \frac{1}{5}$ 171) _____

A) $1\frac{1}{5}$ B) $\frac{1}{30}$ C) 30 D) 6

172) $18 \div \frac{3}{5}$ 172) _____

A) $\frac{1}{30}$ B) 30 C) $10\frac{4}{5}$ D) 6

173) $2 \div \frac{3}{2}$ 173) _____

A) 3 B) $\frac{3}{4}$ C) $1\frac{1}{3}$ D) $\frac{1}{6}$

174) $\frac{7}{4} \div 2$ 174) _____

A) $\frac{7}{8}$ B) $\frac{2}{7}$ C) $\frac{1}{8}$ D) $3\frac{1}{2}$

175) $\frac{7}{10} \div 1$ 175) _____

A) $\frac{10}{7}$ B) $\frac{7}{10}$ C) $\frac{7}{11}$ D) $1\frac{3}{7}$

176) $\frac{6}{7} \div 2$ 176) _____

A) $1\frac{5}{7}$ B) $2\frac{1}{3}$ C) 3 D) $\frac{3}{7}$

177) 177) _____

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

A) 45 B) $7\frac{1}{5}$ C) $\frac{1}{45}$ D) 18

178) 178) _____

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

A) 35 B) $2\frac{6}{7}$ C) $\frac{1}{35}$ D) 5

179) 179) _____

$$\frac{\frac{20}{3}}{5}$$

A) $\frac{3}{4}$ B) $33\frac{1}{3}$ C) 4 D) $1\frac{1}{3}$

Solve the problem.

180) A land developer wants to develop 6 acres of land. Each lot in the development is to be $\frac{1}{4}$ of an acre. How many lots will the land developer have in the 6 acres? 180) _____

A) 6 lots B) $\frac{1}{12}$ lot C) 24 lots D) $1\frac{1}{2}$ lot(s)

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

A) 16 servings B) 9 servings C) $5\frac{1}{3}$ servings D) $3\frac{3}{4}$ 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? 182) _____

A) $9\frac{1}{3}$ servings B) 18 servings C) 32 servings D) $6\frac{3}{4}$ servings

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) 24 servings B) 11 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 9 dose cups, how many children's doses are there in the bottle? 184) _____

A) $1\frac{1}{2}$ dose(s) B) 15 doses C) 54 doses D) $9\frac{1}{6}$ doses

185) A worker has readings that take $\frac{2}{3}$ minute each to read and record. How many readings can be completed in 48 minutes? 185) _____

A) 72 readings B) 16 readings C) 32 readings D) 18 readings

186) The floor of a rectangular room is to be tiled with $\frac{1}{3}$-foot square tiles along a 12-foot wall. How many tiles will be needed along the wall? 186) _____

A) 37 tiles B) $12\frac{1}{3}$ tiles C) 36 tiles D) 4 tiles

187) A piece of cheese weighing $\frac{2}{3}$ pound is to be divided into 4 equal portions. What will be the weight of each portion? 187) _____

A) 6 pounds B) $\frac{1}{6}$ pound C) $\frac{2}{3}$ pound(s) D) $2\frac{2}{3}$ pound(s)

188) A piece of cable which is $\frac{2}{3}$ m long is to be cut into pieces $\frac{1}{9}$ m long. How many pieces will there be? 188) _____

A) 6 pieces B) $\frac{1}{6}$ piece C) 27 pieces D) 18 pieces

189) The recipe for a chocolate chip cake calls for $\frac{2}{3}$ pound of chocolate chips. If a bakery wants to make 24 cakes, how many pounds of chocolate chips will they need? 189) _____

A) 14 pounds B) 12 pounds C) 8 pounds D) 16 pounds

190) An upholsterer wants to reupholster 120 chairs for a banquet hall. If each chair needs $\frac{1}{3}$ pound of brass tacks, how many pounds of brass tacks are needed? 190) _____

A) 4 pounds B) 360 pounds C) 36 pounds D) 40 pounds

191) A mechanic uses on average $\frac{4}{5}$ gallon(s) of gear lube to service each tractor differential. Find the number of tractors that can be serviced with 16 gallons of gear lube. 191) _____

A) 4 tractors B) 64 tractors C) $12\frac{4}{5}$ tractors D) 20 tractors

192) A building contractor finds that $\frac{2}{5}$ can of pipe joint compound is needed to plumb each new home. How many homes can be plumbed with 12 cans of compound? 192) _____

A) 15 homes B) $4\frac{4}{5}$ homes C) 12 homes D) 30 homes

193) Jeremy has traveled $\frac{6}{7}$ of his total trip. If the trip is a total of 749 miles, how many miles has he gone? 193) _____

A) 642 miles B) 107 miles C) 321 miles D) $91\frac{5}{7}$ miles

194) Susan has been working on a job that will require 40 hours to complete. If she has completed $\frac{4}{5}$ of the job, how many hours has she worked? 194) _____

A) 8 hours B) 32 hours C) 16 hours D) $6\frac{2}{5}$ 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 867 yards of fabric. 195) _____

A) 347 scarves B) 1445 scarves C) 2168 scarves D) 520 scarves

196) Each patient will receive $\frac{9}{10}$ vial of medication. How many patients can be treated with 4950 vials of medication? 196) _____

A) 4455 patients B) 8910 patients C) 550 patients D) 5500 patients

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

197) $4\frac{4}{5} \cdot 4\frac{3}{8}$ 197) _____

A) 21 B) 22 C) $16\frac{12}{40}$ D) 23

198) $3\frac{1}{3} \cdot 1\frac{1}{5}$ 198) _____

A) 7 B) $3\frac{2}{15}$ C) 5 D) 4

199) $2\frac{4}{7} \cdot 2\frac{1}{3}$ 199) _____

A) 5 B) 6 C) 4 D) 2

200) $3\frac{4}{7} \cdot 14$ 200) _____

A) 42 B) 294 C) $17\frac{4}{7}$ D) 50

201) $8 \cdot 2\frac{17}{18}$ 201) _____

A) $23\frac{7}{9}$ B) $23\frac{5}{9}$ C) $10\frac{5}{9}$ D) $16\frac{17}{18}$

202) $4 \cdot 5\frac{5}{16}$ 202) _____

A) 20 B) $21\frac{1}{4}$ C) $20\frac{1}{4}$ D) $20\frac{5}{16}$

203) $2\frac{1}{6} \cdot \frac{3}{7}$ 203) _____

A) $2\frac{3}{42}$ B) $\frac{13}{14}$ C) $1\frac{13}{14}$ D) $\frac{11}{14}$

204) $1\frac{1}{4} \cdot \frac{1}{7} \cdot \frac{4}{5}$ 204) _____

A) $\frac{2}{5}$ B) $\frac{1}{35}$ C) $\frac{2}{7}$ D) $\frac{1}{7}$

205) $3 \cdot 5\frac{2}{9} \cdot \frac{4}{5}$ 205) _____

A) $12\frac{8}{15}$ B) $8\frac{12}{15}$ C) $12\frac{7}{15}$ D) $11\frac{8}{15}$

206) $4\frac{2}{7} \cdot 5 \cdot \frac{3}{5}$ 206) _____

A) $12\frac{6}{7}$ B) $20\frac{10}{21}$ C) $9\frac{6}{7}$ D) $20\frac{6}{7}$

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

207) $5\frac{8}{9} \div 1\frac{5}{9}$ 207) _____

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

208) $5\frac{8}{9} \div 1\frac{1}{6}$ 208) _____

A) $5\frac{1}{21}$ B) $5\frac{1}{20}$ C) $5\frac{2}{21}$ D) $6\frac{1}{21}$

209) $2\frac{2}{3} \div 1\frac{2}{9}$ 209) _____

A) $2\frac{3}{11}$ B) $2\frac{2}{11}$ C) $2\frac{2}{10}$ D) $3\frac{2}{11}$

210) $5\frac{1}{8} \div 1\frac{3}{5}$ 210) _____

A) $4\frac{13}{64}$ B) $3\frac{14}{64}$ C) $3\frac{13}{63}$ D) $3\frac{13}{64}$

211) $44 \div 3\frac{2}{3}$ 211) _____

A) 12 B) 13 C) $10\frac{1}{2}$ D) 11

212) $4\frac{4}{7} \div 8$ 212) _____

A) $\frac{3}{7}$ B) $\frac{4}{6}$ C) $\frac{5}{7}$ D) $\frac{4}{7}$

213) $1\frac{1}{7} \div \frac{1}{7}$ 213) _____

A) 7 B) 9 C) $6\frac{1}{2}$ D) 8

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

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

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

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

1 pinch salt

3 eggs

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

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

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

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

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

C) Estimate: $7\frac{1}{2}$ tsp
Exact: 9 tsp

D) Estimate: 9 tbsp
Exact: $7\frac{1}{2}$ tbsp

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

D) Estimate: 2 tsp
Exact: 3 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: 6 cups
Exact: $3\frac{3}{4}$ cups

C) Estimate: $3\frac{3}{4}$ cups
Exact: 5 cups

D) Estimate: 4 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
Exact: $3\frac{3}{8}$ tsp

C) Estimate: 4 tsp
Exact: $3\frac{3}{8}$ tsp

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

Solve the problem.

218) A small company sells stock for $8\frac{5}{8}$ dollars per share. How much will 160 shares cost? 218) _____

A) $18\frac{38}{69}$ dollars B) 1380 dollars C) 165 dollars D) 160 dollars

219) Tim needs to apply $3\frac{3}{4}$ gallons of herbicide per acre of soybeans. How many gallons of herbicide are needed for 312 acres? 219) _____

A) 1170 gallons B) $234\frac{3}{4}$ gallons C) $83\frac{1}{5}$ gallons D) 237 gallons

220) On a certain map, 1 inch equals 40 miles. How many miles are in $3\frac{1}{4}$ inches? 220) _____

A) 130 miles B) $30\frac{1}{4}$ miles C) $12\frac{4}{13}$ miles D) 31 miles

221) A statistician has readings that take $1\frac{2}{3}$ minutes each to read and record. How many readings can be completed in 120 minutes? 221) _____

A) 14 readings B) 42 readings C) 200 readings D) 72 readings

222) The floor of a rectangular room is to be tiled with $\frac{1}{3}$ foot square tiles along a $9\frac{3}{8}$ foot wall. How many tiles will be needed along the wall? 222) _____

A) $27\frac{3}{8}$ tiles B) 30 tiles C) $3\frac{1}{8}$ tiles D) $28\frac{1}{8}$ tiles

223) Stock in a company is selling for $\$11\frac{1}{2}$ per share. If someone purchased \$4140 worth of stock in this company, how many shares did they get? 223) _____

A) 16,560 shares B) 4140 shares C) 360 shares D) $551\frac{1}{2}$ 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) 155 cups B) $38\frac{3}{4}$ cups C) $6\frac{1}{5}$ cups D) $9\frac{11}{16}$ cups

225) A car traveled 141 miles on $9\frac{2}{5}$ gallons of gas. How many miles per gallon did it get? 225) _____

A) $15\frac{2}{3}$ mpg B) $15\frac{5}{9}$ C) 16 mpg D) 15 mpg

Provide an appropriate response.

226) When the numerator is the same as the denominator, for example $\frac{5}{5}$, the fraction is called a(n) _____ fraction. 226) _____

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

227) A proper fraction has the form $\frac{x}{18}$. What is the largest possible number that x can be? 227) _____

A) 18 B) 19 C) 17 D) 9

228) You are asked to change $18\frac{7}{11}$ to an improper fraction. What should be your first step? 228) _____

A) Add 18 and 7. B) Divide 7 by 11.
C) Multiply 7 and 18. D) Multiply 11 and 18.

229) You are asked to change $\frac{30}{29}$ to a mixed number. What should be your first step? 229) _____

A) Divide 30 by 29. B) Multiply 30 and 29.
C) Add 30 and 29. D) Divide 29 by 30.

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

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

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

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

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

A) simplification B) common factors
C) the method of prime factors D) equivalent terms

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

A) multiplying; multiplying B) multiplying; canceling
C) multiplying; adding D) adding; multiplying

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 $\frac{3}{5}$, the answer is _____ the fraction. 234) _____

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

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

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

Answer Key
Testname: UNTITLED2

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

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

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

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

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