

Exam

Name _____

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

Identify the numerator and the denominator of the fraction.

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

A) Numerator 5

Denominator 6 B) Numerator 11

Denominator 1

C) Numerator 6

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

Denominator 6

Simplify.

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

A) 37 B) 0 C) 1 D) $\frac{1}{37}$

3) $\frac{48}{1}$ 3) _____

A) 47 B) $\frac{1}{48}$ C) 1 D) 48

4) $\frac{11}{0}$ 4) _____

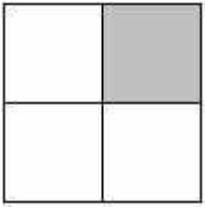
A) 11 B) undefined C) 0 D) $\frac{1}{11}$

5) $\frac{0}{9}$ 5) _____

A) 0 B) $\frac{1}{9}$ C) undefined D) 9

Write a fraction to represent the shaded part of the figure.

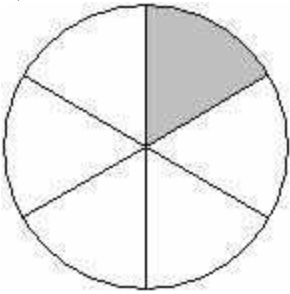
6)



6) _____

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

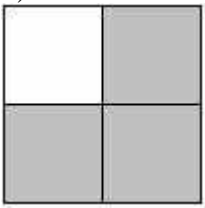
7)



7) _____

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

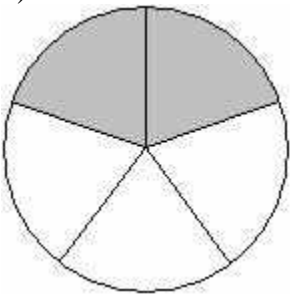
8)



8) _____

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

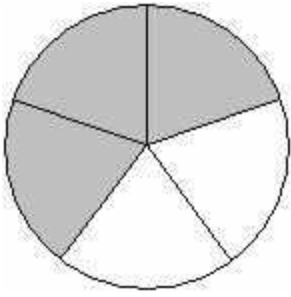
9)



9) _____

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

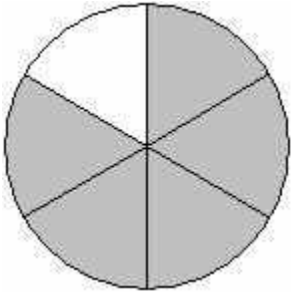
10)



10) _____

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

11)



11) _____

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

12)



12) _____

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

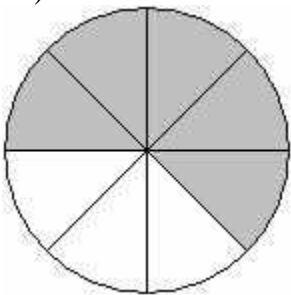
13)



13) _____

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

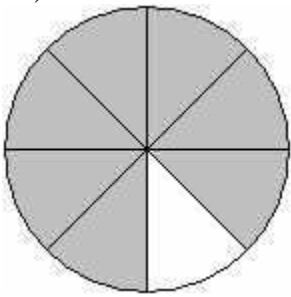
14)



14) _____

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

15)



15) _____

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

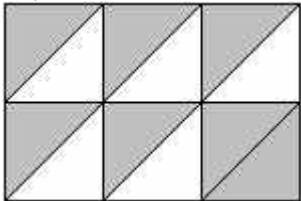
16)



16) _____

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

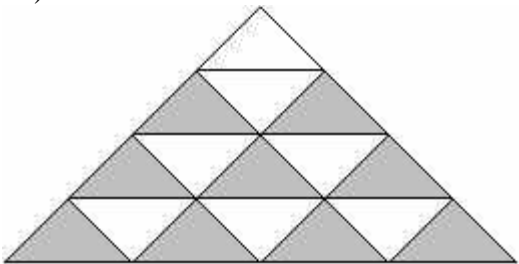
17)



17) _____

- A) $\frac{5}{7}$ B) $\frac{7}{5}$ C) $\frac{7}{12}$ D) $\frac{5}{12}$

18)



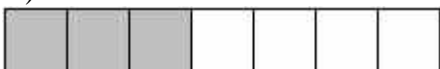
18) _____

- A) $\frac{9}{7}$ B) $\frac{7}{9}$ C) $\frac{7}{16}$ D) $\frac{9}{16}$

Draw and shade a part of a diagram to represent the figure.

19) $\frac{4}{7}$ of a diagram 19) _____

A)



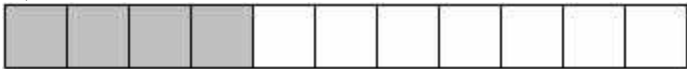
B)



C)

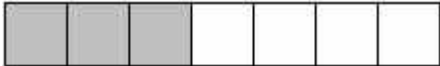


D)

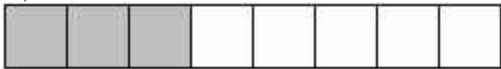


20) $\frac{3}{8}$ of a diagram 20) _____

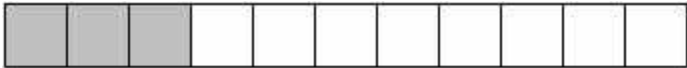
A)



B)



C)



D)



21) $\frac{5}{8}$ of a diagram 21) _____

A)



B)



C)

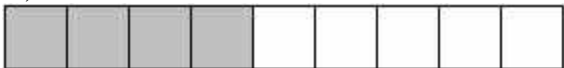


D)



22) $\frac{4}{9}$ of a diagram 22) _____

A)



B)



C)

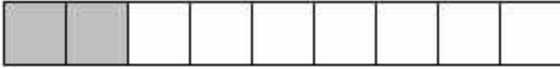


D)



23) $\frac{7}{9}$ of a diagram 23) _____

A)



B)



C)



D)



24) $\frac{7}{10}$ of a diagram 24) _____

A)



B)



C)



D)



25) $\frac{3}{10}$ of a diagram 25) _____

A)



B)



C)



D)



26) $\frac{4}{11}$ of a diagram 26) _____

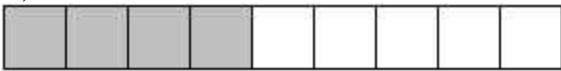
A)



B)



C)

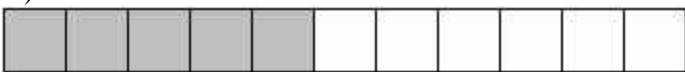


D)



27) $\frac{6}{11}$ of a diagram 27) _____

A)



B)



C)



D)



28) $\frac{8}{11}$ of a diagram 28) _____

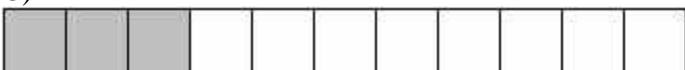
A)



B)



C)



D)



Write the fraction.

29) Of the 192 students at a private school, 33 are juniors. What fraction of the students are juniors?

A) $\frac{192}{33}$ B) $\frac{33}{192}$ C) $\frac{33}{159}$ D) $\frac{159}{33}$ 29) _____

30) Of the 269 students at a private school, 37 are juniors. What fraction of the students are NOT juniors? 30)

A) $\frac{232}{37}$ B) $\frac{37}{269}$ C) $\frac{232}{269}$ D) $\frac{269}{232}$

31) Of the 107 doctors at a hospital, 58 are women. What fraction of the doctors are women?

A) $\frac{58}{107}$ B) $\frac{58}{49}$ C) $\frac{107}{58}$ D) $\frac{49}{58}$ 31) _____

32) Of the 92 doctors at a hospital, 88 are men. What fraction of the doctors are NOT men?

A) $\frac{92}{4}$ B) $\frac{88}{4}$ C) $\frac{4}{88}$ D) $\frac{4}{92}$ 32) _____

33) According to a recent study, 3 out of 16 visits to a hospital emergency room were for an injury. What fraction of emergency room visits are NOT injury-related? 33) _____

A) $\frac{16}{13}$ B) $\frac{3}{13}$ C) $\frac{13}{3}$ D) $\frac{13}{16}$

34) There are 100 centimeters in a meter. What fractional part of a meter does 33 centimeters represent? 34) _____

A) $\frac{33}{67}$ B) $\frac{67}{33}$ C) $\frac{100}{33}$ D) $\frac{33}{100}$

35) In a speech class containing 79 students, there are 16 freshmen, 8 sophomores, 9 juniors, and the rest are seniors. What fraction of the class is seniors? 35) _____

A) $\frac{1}{4}$ B) $\frac{46}{79}$ C) $\frac{46}{103}$ D) $\frac{79}{46}$

36) At Smith's Apple Orchard one day, 52 people were picking apples, 17 people were picking pumpkins, and 31 people were picking raspberries. What fractional part of the people were picking pumpkins? 36) _____

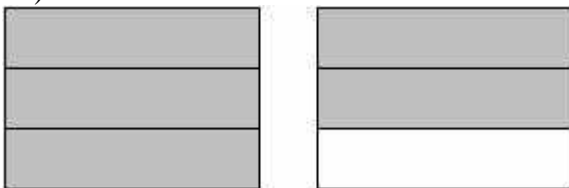
A) $\frac{17}{100}$ B) $\frac{17}{83}$ C) $\frac{100}{17}$ D) $\frac{52}{100}$

37) At Smith's Apple Orchard one day, 59 people were picking apples, 31 people were picking pumpkins, and 10 people were picking raspberries. What fractional part of the people were picking either apples or pumpkins? 37) _____

A) $\frac{31}{100}$ B) $\frac{59}{100}$ C) $\frac{90}{10}$ D) $\frac{90}{100}$

Write the shaded area in the figure as a mixed number and as an improper fraction.

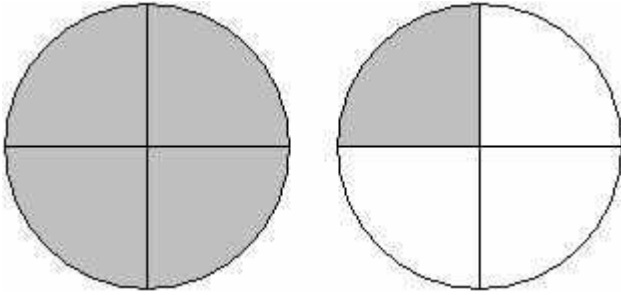
38)



38) _____

- A) $2\frac{2}{3}, \frac{5}{3}$ B) $5\frac{1}{3}, \frac{5}{3}$ C) $1\frac{2}{3}, \frac{5}{3}$ D) $1\frac{5}{6}, \frac{5}{3}$

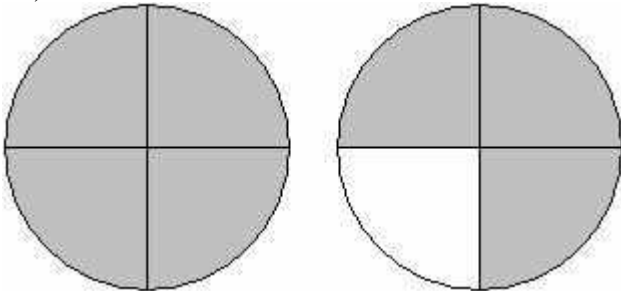
39)



39) _____

- A) $2\frac{1}{4}, \frac{5}{4}$ B) $1\frac{5}{8}, \frac{5}{4}$ C) $1\frac{1}{4}, \frac{5}{4}$ D) $1\frac{3}{4}, \frac{5}{4}$

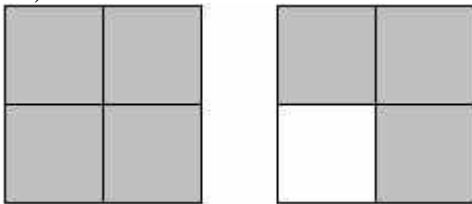
40)



40) _____

- A) $4\frac{3}{4}, \frac{7}{4}$ B) $1\frac{7}{8}, \frac{7}{4}$ C) $1\frac{3}{4}, \frac{7}{4}$ D) $2\frac{3}{4}, \frac{7}{4}$

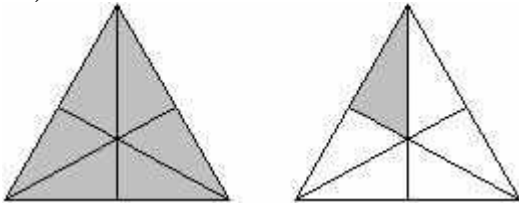
41)



41) _____

- A) $4\frac{3}{4}, \frac{7}{4}$ B) $2\frac{7}{8}, \frac{7}{4}$ C) $1\frac{7}{8}, \frac{7}{4}$ D) $1\frac{3}{4}, \frac{7}{4}$

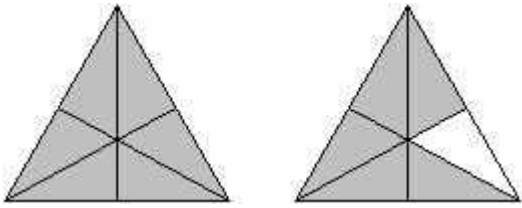
42)



42) _____

- A) $1\frac{1}{12}, \frac{7}{6}$ B) $1\frac{1}{5}, \frac{7}{6}$ C) $1\frac{7}{12}, \frac{7}{6}$ D) $1\frac{1}{6}, \frac{7}{6}$

43)



43) _____

- A) $2\frac{11}{12}, \frac{11}{6}$ B) $2\frac{5}{6}, \frac{11}{6}$ C) $1\frac{5}{6}, \frac{11}{6}$ D) $1\frac{11}{12}, \frac{11}{6}$

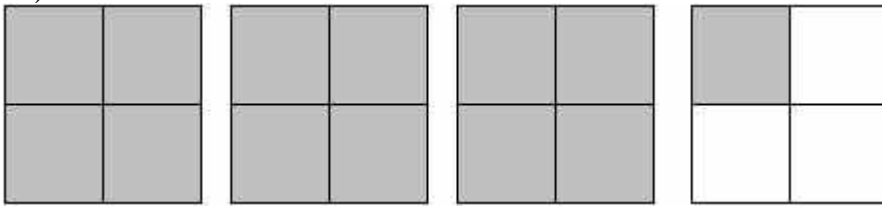
44)



44) _____

- A) $2\frac{1}{3}, \frac{7}{3}$ B) $2\frac{7}{9}, \frac{7}{3}$ C) $3\frac{1}{3}, \frac{7}{3}$ D) $2\frac{1}{9}, \frac{7}{3}$

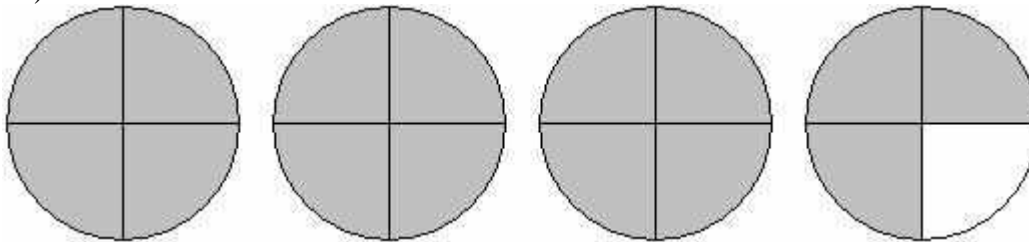
45)



45) _____

- A) $4\frac{1}{4}, \frac{13}{4}$ B) $3\frac{1}{4}, \frac{13}{4}$ C) $4\frac{13}{16}, \frac{13}{4}$ D) $3\frac{13}{16}, \frac{13}{4}$

46)



46) _____

- A) $4\frac{3}{4}, \frac{15}{4}$ B) $3\frac{15}{16}, \frac{15}{4}$ C) $3\frac{1}{4}, \frac{13}{4}$ D) $3\frac{3}{4}, \frac{15}{4}$

Write the mixed number as an improper fraction.

47) $6\frac{7}{8}$ 47) _____

- A) $\frac{48}{8}$ B) $\frac{55}{7}$ C) $\frac{55}{8}$ D) $\frac{48}{7}$

48) $5\frac{3}{5}$ 48) _____

A) $\frac{28}{5}$ B) $\frac{25}{3}$ C) $\frac{25}{5}$ D) $\frac{28}{3}$

49) $7\frac{4}{5}$ 49) _____

A) $\frac{39}{4}$ B) $\frac{39}{5}$ C) $\frac{35}{4}$ D) $\frac{35}{5}$

50) $5\frac{4}{5}$ 50) _____

A) $\frac{25}{4}$ B) $\frac{29}{5}$ C) $\frac{29}{4}$ D) $\frac{25}{5}$

51) $17\frac{21}{25}$ 51) _____

A) 38 B) $\frac{357}{25}$ C) $\frac{446}{25}$ D) 357

52) $205\frac{3}{7}$ 52) _____

A) 208 B) $\frac{1438}{7}$ C) 615 D) $\frac{615}{7}$

Write the improper fraction as a mixed or whole number.

53) $\frac{28}{3}$ 53) _____

A) $9\frac{1}{3}$ B) $\frac{1}{3}$ C) $10\frac{1}{3}$ D) $8\frac{1}{7}$

54) $\frac{39}{5}$ 54) _____

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

55) $\frac{49}{6}$ 55) _____

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

56) $\frac{56}{7}$ 56) _____

A) $\frac{8}{2}$ B) 57 C) 55 D) 8

57) $\frac{53}{11} \overline{)57}$ _____

A) $53 \frac{53}{11}$ B) $4 \frac{9}{11}$ C) $\frac{11}{53}$ D) $53 \frac{11}{53}$

58) $\frac{152}{7}$ 58) _____

A) $152 \frac{7}{152}$ B) $152 \frac{152}{7}$ C) $21 \frac{5}{7}$ D) $\frac{7}{152}$

59) $\frac{193}{187}$ 59) _____

A) $187 \frac{6}{187}$ B) $1 \frac{187}{6}$ C) $1 \frac{6}{187}$ D) $1 \frac{6}{193}$

60) $\frac{904}{111}$ 60) _____

A) $7 \frac{16}{111}$ B) $8 \frac{15}{111}$ C) $9 \frac{16}{111}$ D) $8 \frac{16}{111}$

List all the factors of the number.

61) 30

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

61) _____

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

62) 28

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

62) _____

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

63) 36

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

63) _____

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

64) 45

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

64) _____

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

65) 56

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

65) _____

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

66) 63

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

66) _____

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

67) 66

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

67) _____

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

68) 70

A) 1, 2, 5, 7, 10, 14, 35, 70 B) 1, 2, 3, 5, 7, 9, 15, 35, 70

68) _____

C) 1, 2, 5, 7, 35, 70 D) 1, 3, 5, 7, 9, 15, 20, 35, 70

69) 2

A) no factors B) 2 C) 1 D) 1, 2

69) _____

70) 15

A) 3, 5 B) 1, 3, 5, 15 C) 1, 15 D) 3, 5, 15

70) _____

Identify the number as prime or composite.

71) 50

A) Composite B) Prime

71) _____

72) 53

A) Composite B) Prime

72) _____

73) 88

A) Composite B) Prime

73) _____

74) 163

A) Composite B) Prime

74) _____

75) 189

A) Composite B) Prime

75) _____

Find the prime factorization of the number. Write any repeated factors using exponents.

76) 385

A) $35 \cdot 11$ B) $7^2 \cdot 5$ C) $5 \cdot 7 \cdot 11$ D) $5^2 \cdot 11$ 76) _____

77) 445

A) 5^2 B) $5 \cdot 87$ C) $5 \cdot 89$ D) $5^2 \cdot 89$ 77) _____

78) 64

A) 2^6 B) $2 \cdot 6$ C) 6^2 D) Prime

78) _____

79) 45

A) $9 \cdot 3$ B) 5^2 C) $3^2 \cdot 5$ D) $9 \cdot 5$

79) _____

80) 275

A) $5^3 \cdot 11$ B) $5 \cdot 11$ C) $5^2 \cdot 11$ D) $5 \cdot 11^2$ 80) _____

81) 168

A) $2^3 \cdot 3 \cdot 7$ B) $2 \cdot 3^3 \cdot 7$ C) $2 \cdot 3 \cdot 7$ D) $2^2 \cdot 3 \cdot 7$ 81) _____

82) 90

A) $2 \cdot 3 \cdot 5$ B) $10 \cdot 3^2$ C) $2 \cdot 3^2 \cdot 5$ D) $2^2 \cdot 3^2 \cdot 5$ 82) _____

83) 36

A) $2^2 \cdot 3^3$ B) $2 \cdot 3^2$ C) $2^2 \cdot 3$ D) $2^2 \cdot 3^2$ 83) _____

84) 684

A) $2^2 \cdot 3^2 \cdot 19$ B) $2^4 \cdot 19$ C) $2^3 \cdot 3^2 \cdot 19$ D) $3^4 \cdot 19$ 84) _____

85) 2600

A) $2^4 \cdot 5 \cdot 13$ B) $2^3 \cdot 5^3 \cdot 13$ C) $2 \cdot 5^4 \cdot 13$ D) $2^3 \cdot 5^2 \cdot 13$ 85) _____

86) 795

A) $3^2 \cdot 53$ B) $5^2 \cdot 53$ C) $15 \cdot 53$ D) $3 \cdot 5 \cdot 53$

86) _____

87) 133

A) $8 \cdot 21$ B) $18 \cdot 9$ C) $7^2 \cdot 19$ D) $7 \cdot 19$

87) _____

88) 24,975

A) $3^2 \cdot 5^3 \cdot 37$ B) $3^4 \cdot 37$ C) $5^4 \cdot 37$ D) $3^3 \cdot 5^2 \cdot 37$ 88) _____

Write the fraction in simplest form.

89) $\frac{48}{54}$ 89) _____

A) $\frac{8}{9}$ B) $\frac{8}{6}$ C) $\frac{6}{9}$ D) $\frac{48}{54}$

90) $\frac{55}{77}$ 90) _____

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

91) $\frac{28}{47}$ 91) _____

A) $\frac{28}{47}$ B) $\frac{1}{47}$ C) $\frac{23}{14}$ D) $\frac{14}{23}$

92) $\frac{30}{80}$ 92) _____

A) $\frac{3}{8}$ B) $\frac{3}{10}$ C) $\frac{30}{80}$ D) $\frac{10}{8}$

93) $\frac{140}{180}$ 93) _____

A) $\frac{140}{180}$ B) $\frac{7}{20}$ C) $\frac{20}{9}$ D) $\frac{7}{9}$

94) $\frac{51}{57}$ 94) _____

A) $\frac{17}{19}$ B) $\frac{3}{19}$ C) $\frac{51}{57}$ D) $\frac{17}{3}$

95) $\frac{198}{234}$ 95) _____

A) $\frac{198}{234}$ B) $\frac{11}{13}$ C) $\frac{11}{18}$ D) $\frac{18}{13}$

96) $\frac{520}{600}$ 96) _____

A) $\frac{15}{13}$ B) $\frac{13}{15}$ C) $\frac{520}{600}$ D) $\frac{600}{520}$

97) $\frac{189}{36}$ 97) _____

A) $\frac{4}{9}$ B) $\frac{21}{4}$ C) $\frac{21}{9}$ D) $\frac{9}{4}$

98) $\frac{240}{30}$ 98) _____

A) $\frac{40}{5}$ B) 8 C) $\frac{8}{5}$ D) $\frac{48}{6}$

99) $\frac{286}{33}$ 99) _____

A) 26 B) $\frac{11}{3}$ C) $\frac{26}{11}$ D) $\frac{26}{3}$

100) $\frac{492}{2706}$ 100) _____

A) $\frac{3}{11}$ B) $\frac{2}{11}$ C) $\frac{82}{451}$ D) $\frac{123}{451}$

Determine whether the pair of fractions is equivalent.

101) $\frac{3}{9}$ and $\frac{21}{63}$ 101) _____

A) equivalent B) not equivalent

102) $\frac{1}{7}$ and $\frac{9}{119}$ 102) _____

A) not equivalent B) equivalent

103) $\frac{1}{4}$ and $\frac{9}{12}$ 103) _____

A) equivalent B) not equivalent

104) $\frac{3}{8}$ and $\frac{39}{104}$ 104) _____

A) not equivalent B) equivalent

105) $\frac{9}{21}$ and $\frac{6}{14}$ 105) _____

A) equivalent B) not equivalent

106) $\frac{35}{60}$ and $\frac{42}{84}$ 106) _____

A) equivalent B) not equivalent

Solve. Write the fractions in simplest form.

107) There are 5280 feet in a mile. What fraction of a mile is represented by 720 feet?

A) $\frac{720}{5280}$ B) $\frac{3}{22}$ C) $\frac{1}{44}$ D) $\frac{3}{19}$ 107) _____

108) There are 100 centimeters in 1 meter. What fraction of a meter is 65 centimeters?

A) $\frac{13}{20}$ B) $\frac{13}{7}$ C) $\frac{65}{100}$ D) $\frac{1}{10}$ 108) _____

109) A company employs 144,000 employees worldwide. About 36,000 employees work in the United States. What fraction of the employees work in the United States? 109) _____

A) $\frac{1}{4}$ B) $\frac{5}{2}$ C) $\frac{1}{40}$ D) $\frac{36,000}{144,000}$

110) A company employs 675,000 employees worldwide. About 49,500 employees work in the United States. What fraction of the employees do NOT work in the United States? 110) _____

A) $\frac{139}{150}$ B) $\frac{49,500}{675,000}$ C) $\frac{11}{150}$ D) $\frac{625,500}{675,000}$

111) There are 1200 employees at a company. If 900 are males, what fraction of the employees are males?
111) _____

A) $\frac{3}{4}$ B) $\frac{1}{4}$ C) $\frac{900}{\text{males}}$ D) $\frac{1}{3}$

112) There are 8000 runners at a marathon. If 6400 are male, what fraction of the runners are female?

A) $\frac{2}{8}$ B) $\frac{6400}{8000}$ C) $\frac{1}{5}$ D) $\frac{4}{5}$ 112) _____

113) A real estate agent categorized 100 available homes by housing style.

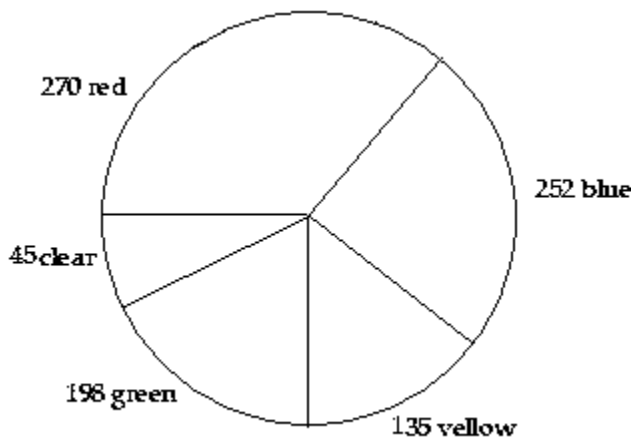
Distribution of Houses by Style

Housing Style	Number of Homes
Two Story	38
One and One-Half Story	12
Raised Ranch	6
Split Level	25
Ranch	19

What fraction of available homes are split-level homes? 113) _____

- A) $\frac{25}{100}$ B) $\frac{1}{4}$ C) $\frac{25}{75}$ D) $\frac{1}{3}$

114) The following graph is called a circle graph or pie chart. Each sector (shaped like a piece of pie) shows the number of each color of marbles that Jay has: 270 are red, 252 are blue, 135 are yellow, 198 are green, and 45 are clear. What fraction of the marbles are red? Write the fraction in simplest form.



114) _____

- A) $\frac{3}{7}$ B) $\frac{3}{10}$ C) $\frac{270}{900}$ D) $\frac{1}{5}$

Multiply. Write the answer in simplest form.

115) $\frac{2}{5} \cdot \frac{8}{9}$ 115) _____

- A) $\frac{45}{16}$ B) $\frac{16}{45}$ C) $\frac{20}{9}$ D) $\frac{5}{7}$

116) $\frac{7}{10} \cdot \frac{17}{11}$ 116) _____

- A) $\frac{77}{170}$ B) $\frac{8}{7}$ C) $\frac{2}{3}$ D) $\frac{119}{110}$

117) $\frac{1}{7} \cdot \frac{15}{20}$ 117) _____

- A) $\frac{3}{28}$ B) $\frac{21}{22}$ C) $\frac{16}{27}$ D) $\frac{4}{21}$

118) $\frac{1}{3} \cdot \frac{4}{5} \cdot \frac{2}{5}$ 118) _____

A) $\frac{8}{13}$ B) $\frac{8}{75}$ C) $\frac{1}{6}$ D) $\frac{4}{75}$

119) $\frac{3}{9} \cdot \frac{3}{7}$ 119) _____

A) $\frac{3}{8}$ B) $\frac{5}{6}$ C) $\frac{7}{9}$ D) $\frac{1}{7}$

120) $\frac{5}{1} \cdot \frac{18}{11}$ 120) _____

A) $\frac{23}{12}$ B) $\frac{90}{11}$ C) $\frac{16}{19}$ D) $\frac{55}{18}$

121) $0 \cdot \frac{2}{3}$ 121) _____

A) 0 B) $\frac{2}{3}$ C) undefined D) $\frac{3}{2}$

122) $\frac{10}{11} \cdot 0$ 122) _____

A) 0 B) undefined C) $\frac{11}{10}$ D) $\frac{10}{11}$

123) $\frac{17}{18} \cdot \frac{1}{18} \cdot \frac{1}{2}$ 123) _____

A) $\frac{17}{324}$ B) $\frac{648}{17}$ C) $\frac{17}{648}$ D) $\frac{11}{144}$

124) $\frac{4}{7} \cdot 0 \cdot \frac{1}{5}$ 124) _____

A) $\frac{9}{19}$ B) $\frac{4}{35}$ C) 0 D) undefined

125) $\frac{1}{2} \cdot \frac{3}{7} \cdot \frac{6}{14} \cdot \frac{28}{2}$ 125) _____

A) $\frac{7}{9}$ B) $\frac{9}{7}$ C) $\frac{3}{14}$ D) $\frac{38}{25}$

126) $4\frac{1}{5} \cdot 5$ 126) _____

A) 20 B) $9\frac{1}{5}$ C) 100 D) 21

127) $4 \cdot 6\frac{7}{18}$ 127) _____

A) $24\frac{7}{18}$ B) $10\frac{5}{9}$ C) $25\frac{7}{9}$ D) $25\frac{5}{9}$

128) $1\frac{1}{5} \cdot \frac{4}{9}$ 128) _____

A) $1\frac{4}{45}$ B) $\frac{6}{15}$ C) $1\frac{8}{15}$ D) $\frac{8}{15}$

129) $1\frac{7}{8} \cdot 6\frac{2}{5}$ 129) _____

A) 6 B) 4 C) 11 D) 12

130) $3 \cdot 4\frac{8}{15}$ 130) _____

A) $13\frac{3}{5}$ B) $12\frac{3}{5}$ C) 12 D) $12\frac{8}{15}$

131) $1\frac{1}{5} \cdot 5 \cdot \frac{3}{7}$ 131) _____

A) $2\frac{4}{7}$ B) $5\frac{7}{15}$ C) $6\frac{4}{7}$ D) $5\frac{4}{7}$

132) $6 \cdot 9\frac{9}{16}$ 132) _____

A) $57\frac{5}{8}$ B) $54\frac{9}{16}$ C) $15\frac{3}{8}$ D) $57\frac{3}{8}$

133) $1\frac{4}{5} \cdot \frac{4}{9}$ 133) _____

A) $4\frac{4}{5}$ B) $\frac{2}{5}$ C) $1\frac{16}{45}$ D) $\frac{4}{5}$

134) $45 \cdot \frac{5}{9}$ 134) _____

A) 25 B) $\frac{203}{27}$ C) $\frac{225}{9}$ D) 20

135) $\frac{2}{3} \cdot 7$ 135) _____

- A) $\frac{11}{6}$ B) $\frac{14}{3}$ C) $\frac{2}{21}$ D) $\frac{23}{3}$

136) $\frac{7}{13} \cdot 1$ 136) _____

- A) $\frac{13}{7}$ B) $\frac{4}{7}$ C) $\frac{7}{13}$ D) 1

137) $1 \cdot \frac{4}{5}$ 137) _____

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

138) $\frac{13}{20} \cdot 80 \cdot \frac{100}{40}$ 138) _____

- A) $\frac{13}{8}$ B) 80 C) $\frac{1}{130}$ D) 130

139) $3\frac{2}{3} \cdot 5\frac{6}{7} \cdot 1\frac{1}{2}$ 139) _____

- A) $9\frac{5}{42}$ B) $15\frac{5}{42}$ C) $15\frac{2}{7}$ D) $\frac{451}{14}$

Multiply. Write the answer in simplest form. Find both an exact product and an estimated product.

140) $3\frac{1}{7} \cdot 2\frac{1}{5}$ 140) _____

- A) Exact: $\frac{242}{35}$

Estimate: 12 B) Exact: $\frac{242}{35}$

Estimate: 6 C) Exact: $\frac{36}{7}$

Estimate: 6 D) Exact: $\frac{36}{7}$

Estimate: 12

141) $3\frac{3}{4} \cdot 2\frac{2}{3}$ 141) _____

- A) Exact: Exact: $\frac{91}{12}$

Estimate: 6 B) Exact: 10

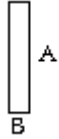
Estimate: 6

C) Exact: $\frac{91}{12}$

Estimate: 12 D) Exact: 10
Estimate: 12

Solve. Write the answer in simplest form.

142) Find the area of the rectangle. Write the answer in simplest form. Recall that the area = (length) · (width).



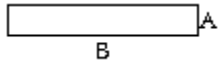
$$A = \frac{4}{5} \text{ foot}$$

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

142) _____

- A) $\frac{4}{7}$ square foot B) $\frac{5}{7}$ square foot C) $\frac{2}{5}$ square foot D) $\frac{4}{10}$ square foot

143) Find the area of the rectangle. Write the answer in simplest form. Recall that the area = (length) · (width).



$$A = \frac{3}{11} \text{ yard}$$

$$B = 11 \text{ yards}$$

143) _____

- A) 3 square yards B) $\frac{33}{11}$ square yards
C) $\frac{124}{11}$ square yards D) $\frac{14}{11}$ square yards

144) Raya is saving $\frac{3}{14}$ of her monthly income of \$ 5754 for retirement. How much money is she setting aside each month for retirement? 144) _____

- A) \$ 1233 B) \$ 411 C) \$ 137 D) \$ 26,852

145) Maria exercises for $1\frac{1}{7}$ hours every Saturday. She runs for $\frac{3}{8}$ of the time that she exercises. How much time does she spend running every Saturday? 145) _____

- A) $\frac{1}{7}$ hour B) $\frac{3}{7}$ hour C) $1\frac{3}{56}$ hours D) $1\frac{3}{7}$ hours

146) Byron rode his bicycle $6\frac{5}{18}$ miles on each of 8 days. What is the total distance Byron rode? 146) _____

- A) $50\frac{2}{9}$ miles B) $50\frac{4}{9}$ miles C) $14\frac{2}{9}$ miles D) $48\frac{5}{18}$ miles

147) Jennifer is building some shelves and requires 7 pieces of wood that are each $1\frac{2}{7}$ feet long. What is the total length of wood that Jennifer needs? 147) _____

- A) 9 feet B) $8\frac{2}{7}$ feet C) 49 feet D) 7 feet

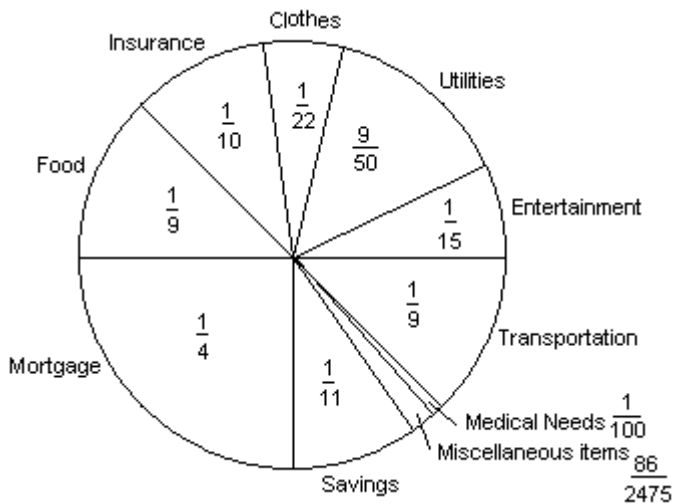
148) A rectangular flower bed in front of a building measures $5\frac{5}{8}$ feet by $3\frac{5}{9}$ feet. What is the total area of the flower bed? Hint: The area of a rectangle is the product of the length times the width. 148) _____

- A) 20 square feet B) $15\frac{25}{72}$ square feet
C) 25 square feet D) 21 square feet

149) A recipe calls for $\frac{1}{4}$ of a pound of sausage. How much sausage should be used if only $\frac{1}{2}$ of the recipe is being made? 149) _____

- A) $\frac{1}{6}$ lb B) $\frac{1}{8}$ lb C) $\frac{1}{3}$ lb D) $\frac{1}{2}$ lb

150) The circle graph below shows the fractional part of the Suarez family's budget spent in each category each month.



If the Suarez's income last month was \$2500, how much money did they spend on their savings? Round to the nearest cent, if necessary. 150) _____

- A) \$ 227.27 B) \$ 113.63 C) \$ 250.00 D) \$ 625.00

151) Find $\frac{1}{17}$ of 68. 151) _____

- A) 1156 B) 17 C) 4 D) $\frac{1}{1156}$

152) Find $\frac{5}{7}$ of 42. 152) _____

A) $\frac{5}{294}$ B) $\frac{294}{5}$ C) 30 D) 42

Find the reciprocal of the number.

153) $\frac{5}{7}$ 153) _____

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

154) $\frac{1}{9}$ 154) _____

A) $\frac{1}{9}$ B) 1 C) 0 D) 9

155) $\frac{1}{14}$ 155) _____

A) 14 B) 0 C) $\frac{1}{14}$ D) 1

156) 8

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

156) _____

157) 17

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

157) _____

158) $\frac{3}{2}$ 158) _____

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

Divide. Write the answer in simplest form.

159) $\frac{6}{6} \div \frac{4}{5}$ 159) _____

A) $\frac{11}{24}$ B) $\frac{10}{11}$ C) $1\frac{1}{4}$ D) $\frac{4}{5}$

160) $\frac{4}{19} \div \frac{3}{4}$ 160) _____

- A) $\frac{16}{57}$ B) $25\frac{1}{3}$ C) $\frac{3}{76}$ D) $\frac{7}{23}$

161) $\frac{7}{19} \div \frac{9}{20}$ 161) _____

- A) $\frac{140}{169}$ B) $\frac{139}{171}$ C) $\frac{138}{171}$ D) $\frac{140}{171}$

162) $\frac{7}{19} \div \frac{9}{17}$ 162) _____

- A) $\frac{119}{171}$ B) $\frac{118}{171}$ C) $\frac{13}{19}$ D) $\frac{119}{169}$

163) $\frac{6}{19} \div \frac{9}{19}$ 163) _____

- A) $\frac{2}{1}$ B) $\frac{1}{3}$ C) $\frac{2}{3}$ D) $\frac{0}{3}$

164) $\frac{7}{20} \div \frac{7}{16}$ 164) _____

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

165) $\frac{9}{7} \div \frac{22}{4}$ 165) _____

- A) $\frac{31}{11}$ B) $\frac{99}{14}$ C) $\frac{18}{77}$ D) $\frac{13}{29}$

166) $\frac{16}{5} \div \frac{4}{5}$ 166) _____

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

Solve.

167) How many $\frac{13}{16}$ pound boxes of cereal can be made from 28,704 pound of cereal? 167) _____

- A) 23,322 boxes B) 35,328 boxes C) 2208 boxes D) 1794 boxes

168) On a recent trip, Asha drove 206 miles on $12\frac{1}{6}$ gallons of gasoline. How many miles per gallon did she average? 168) _____

- A) $412\frac{1}{6}$ miles per gallon B) $2506\frac{1}{3}$ miles per gallon
 C) $\frac{73}{1236}$ miles per gallon D) $16\frac{68}{73}$ miles per gallon

169) Mark is filling decorative oil lamps for a reception. Each lamp can hold $\frac{1}{7}$ cup of oil. Mark has $1\frac{3}{7}$ cups of oil available. How many oil lamps can Mark fill completely? 169) _____

- A) 10 oil lamps B) $8\frac{1}{2}$ oil lamps C) 11 oil lamps D) 9 oil lamps

170) Ted walks around a lake on a path that is $4\frac{5}{7}$ miles long. It takes him $2\frac{6}{7}$ hours to complete his walk. What is his average speed (in miles per hour)? 170) _____

- A) $1\frac{13}{19}$ miles per hour B) $2\frac{13}{20}$ miles per hour
 C) $1\frac{13}{20}$ miles per hour D) $1\frac{14}{20}$ miles per hour

171) Toni needs to cut a $6\frac{4}{5}$ foot board into 3 equal pieces. How long should each piece be? 171) _____

- A) $2\frac{4}{5}$ ft B) $2\frac{4}{15}$ ft C) $20\frac{2}{5}$ ft D) $6\frac{4}{15}$ ft

Divide. Write the answer in simplest form.

172) $0 \div \frac{3}{6}$ 172) _____

- A) 2 B) 0 C) $\frac{1}{2}$ D) Undefined

173) $\frac{2}{7} \div 0$ 173) _____

- A) Undefined B) $3\frac{1}{2}$ C) 0 D) $\frac{2}{7}$

174) $\frac{1}{7} \div \frac{1}{7}$ 174) _____

- A) $\frac{1}{7}$ B) 7 C) 1 D) $\frac{1}{49}$

Perform the indicated operation. Write the answer in simplest form.

175) $\frac{77}{9} \cdot \frac{27}{121} \div \frac{7}{11}$ 175) _____

A) $\frac{1}{3}$ B) $\frac{5929}{243}$ C) 3 D) $\frac{147}{121}$

Divide. Write the answer in simplest form.

176) $5\frac{7}{9} \div 5\frac{1}{6}$ 176) _____

A) $1\frac{11}{92}$ B) $2\frac{11}{93}$ C) $1\frac{12}{93}$ D) $1\frac{11}{93}$

177) $4\frac{5}{9} \div 4\frac{1}{9}$ 177) _____

A) $1\frac{4}{36}$ B) $1\frac{5}{37}$ C) $1\frac{4}{37}$ D) $2\frac{4}{37}$

178) $21 \div 4\frac{1}{5}$ 178) _____

A) 5 B) 6 C) 4 D) $3\frac{1}{2}$

179) $2\frac{4}{5} \div 7$ 179) _____

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

180) $5\frac{7}{9} \div 4\frac{1}{6}$ 180) _____

A) $1\frac{29}{75}$ B) $1\frac{30}{75}$ C) $2\frac{29}{75}$ D) $1\frac{29}{74}$

181) $4\frac{2}{9} \div \frac{2}{9}$ 181) _____

A) $17\frac{1}{2}$ B) 18 C) 20 D) 19

182) $\frac{6}{6} \div 7$ 182) _____

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

183) $28 \div \frac{7}{5}$ 183) _____

A) 19 B) 21 C) $\frac{37}{2}$ D) 20

184) $1 \div \frac{6}{7}$ 184) _____

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

185) $0 \div 16\frac{3}{10}$ 185) _____

- A) $\frac{3}{10}$ B) 0 C) $16\frac{3}{10}$ D) undefined

186) $\frac{8}{19} \div 1$ 186) _____

- A) $\frac{19}{8}$ B) $\frac{9}{20}$ C) $\frac{8}{19}$ D) 1

Solve.

187) How many $\frac{7}{9}$ pound boxes of cereal can be made from 909 pound of cereal? 187) _____

- A) 1287 boxes B) 7007 boxes C) 1001 boxes D) 11,583 boxes

188) On a recent trip, Asha drove 258 miles on $8\frac{1}{9}$ gallons of gasoline. How many miles per gallon did she average?
188) _____

- A) $31\frac{59}{73}$ miles per gallon B) $2092\frac{2}{3}$ miles per gallon
C) $229\frac{4}{9}$ miles per gallon D) $\frac{73}{2322}$ miles per gallon

189) Mark is filling decorative oil lamps for a reception. Each lamp can hold $\frac{2}{5}$ cup of oil. Mark has $1\frac{3}{5}$ cups of oil available. How many oil lamps can Mark fill completely? 189) _____

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

190) Ted walks around a lake on a path that is $5\frac{2}{3}$ miles long. It takes him $3\frac{1}{9}$ hours to complete his walk. What is his average speed (in miles per hour)? 190) _____

- A) $1\frac{24}{28}$ miles per hour B) $1\frac{23}{28}$ miles per hour
C) $2\frac{23}{28}$ miles per hour D) $1\frac{23}{27}$ miles per hour

191) Toni needs to cut a $4\frac{1}{9}$ -foot board into 3 equal pieces. How long should each piece be? 191) _____

- A) $12\frac{1}{3}$ ft B) $4\frac{1}{27}$ ft C) $1\frac{4}{9}$ ft D) $1\frac{10}{27}$ ft

192) The area of the rectangle is 8 square feet. If its length is $5\frac{2}{7}$ feet, find its width.



$5\frac{2}{7}$ feet 192) _____

- A) $42\frac{2}{7}$ ft B) $21\frac{1}{7}$ ft C) $5\frac{2}{7}$ feet D) $1\frac{19}{37}$ ft

193) The perimeter of the square is $12\frac{2}{9}$ meters. Find the length of each side.



193) _____

- A) $24\frac{4}{9}$ m B) $6\frac{1}{9}$ m C) $3\frac{1}{18}$ m D) $48\frac{8}{9}$ m

Solve. Write the answer in simplest form.

194) Approximately $\frac{3}{14}$ of a worldwide corporation's employees live and work in the United States. If 6636 employees live and work in the United States, how many employees does the corporation have worldwide? 194) _____

- A) 1422 employees B) 2212 employees
C) 474 employees D) 30,968 employees

Fill in the blank with one of the words or phrases listed below.

mixed number	equivalent	0	undefined
composite number	improper fraction	simplest form	prime factorization
prime number	proper fraction	numerator	denominator
reciprocals	cross products		

195) Two numbers are _____ of each other if their product is 1. 195) _____

- A) mixed number B) undefined
C) reciprocals D) composite number

196) A(n) _____ is a natural number greater than 1 that is not prime. 196) _____

- A) denominator B) mixed number
C) numerator D) composite number

197) Fractions that represent the same portion of a whole are called _____ fractions. 197) _____

- A) equivalent B) simplest form C) undefined D) prime number

198) A(n) _____ is a fraction whose numerator is greater than or equal to its denominator. 198) _____

- A) improper fraction B) mixed number
C) prime number D) proper fraction

199) A(n) _____ is a natural number greater than 1 whose only factors are 1 and itself. 199) _____

- A) numerator B) prime number
C) composite number D) mixed number

200) A fraction is in _____ when the numerator and the denominator have no factors in common other than 1.

200) _____

- A) prime factorization B) equivalent
C) simplest form D) 0

201) A(n) _____ is one whose numerator is less than its denominator. 201) _____

- A) prime number B) mixed number
C) proper fraction D) improper fraction

202) A(n) _____ contains a whole number part and a fraction part. 202) _____

- A) prime number B) composite number
C) mixed number D) prime factorization

203) In the fraction $\frac{7}{9}$, the 7 is called the _____ and the 9 is called the _____. 203) _____

- A) numerator, prime number B) denominator, numerator
C) composite number, prime number D) numerator, denominator

204) The _____ of a number is the factorization in which all the factors are prime numbers. 204) _____

- A) reciprocals B) 0
C) prime factorization D) simplest form

205) The fraction $\frac{3}{0}$ is _____. 205) _____

- A) undefined B) proper fraction
C) prime factorization D) 0

206) The fraction $\frac{0}{5}$ is _____. 206) _____

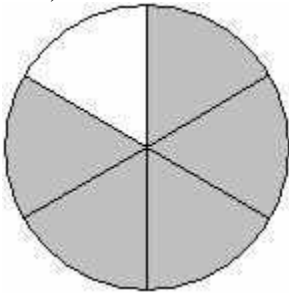
- A) prime factorization B) undefined
C) 0 D) proper fraction

207) In $\frac{a}{b} = \frac{c}{d}$, $a \cdot d$ and $b \cdot c$ are called _____. 207) _____

- A) simplest form B) cross products
 C) reciprocals D) prime factorization

Write a fraction to represent the shaded area.

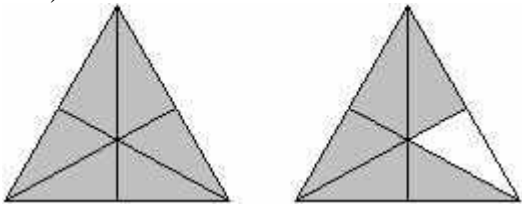
208)



208) _____

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

209)



209) _____

- A) $1\frac{11}{12}$ or $\frac{11}{6}$ B) $2\frac{5}{6}$ or $\frac{11}{6}$ C) $1\frac{5}{6}$ or $\frac{11}{6}$ D) $2\frac{11}{12}$ or $\frac{11}{6}$

Write the mixed number as an improper fraction.

210) $6\frac{5}{7}$ 210) _____

- A) $\frac{47}{7}$ B) $\frac{42}{7}$ C) $\frac{42}{5}$ D) $\frac{47}{5}$

211) $15\frac{9}{10}$ 211) _____

- A) 33 B) $\frac{27}{2}$ C) 270 D) $\frac{159}{10}$

Write the improper fraction as a mixed or whole number.

212) $\frac{29}{5}$ 212) _____

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

213) $\frac{196}{7}$ 213) _____

- A) 28 B) $\frac{28}{2}$ C) 195 D) 197

Write the fraction in simplest form.

214) $\frac{60}{80}$ 214) _____

- A) $\frac{20}{4}$ B) $\frac{60}{80}$ C) $\frac{3}{4}$ D) $\frac{3}{20}$

215) $\frac{154}{187}$ 215) _____

- A) $\frac{14}{17}$ B) $\frac{14}{11}$ C) $\frac{11}{17}$ D) $\frac{154}{187}$

Determine whether the pair of fractions is equivalent.

216) $\frac{5}{9}$ and $\frac{15}{27}$ 216) _____

- A) equivalent B) not equivalent

217) $\frac{5}{7}$ and $\frac{75}{140}$ 217) _____

- A) equivalent B) not equivalent

Find the prime factorization of the number.

218) 350

- A) $2 \cdot 5 \cdot 7$ B) $2^2 \cdot 5^2 \cdot 7$ C) $14 \cdot 5^2$ D) $2 \cdot 5^2 \cdot 7$ 218) _____

219) 4725

- A) $3^3 \cdot 5^3 \cdot 7$ B) $3 \cdot 5^4 \cdot 7$ C) $3^3 \cdot 5^2 \cdot 7$ D) $3^4 \cdot 5 \cdot 7$ 219) _____

Perform the indicated operation. Write the answer in simplest form.

220) $\frac{7}{8} \div \frac{2}{7}$ 220) _____

- A) $\frac{1}{4}$ B) $3\frac{1}{16}$ C) $\frac{7}{8}$ D) $\frac{3}{5}$

221) $\frac{5}{10} \cdot \frac{14}{4}$ 221) _____

- A) $\frac{1}{7}$ B) $\frac{7}{4}$ C) $\frac{19}{14}$ D) $\frac{3}{8}$

222) $\frac{3}{4} \cdot 5$ 222) _____

A) $\frac{15}{4}$ B) $\frac{23}{4}$ C) $\frac{3}{20}$ D) $\frac{11}{8}$

223) $\frac{7}{9} \cdot \frac{1}{6}$ 223) _____

A) $\frac{7}{54}$ B) $\frac{54}{7}$ C) $\frac{8}{15}$ D) $\frac{3}{14}$

224) $18 \div \frac{9}{2}$ 224) _____

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

225) $2\frac{8}{9} \div 13$ 225) _____

A) $\frac{2}{9}$ B) $\frac{1}{9}$ C) $\frac{3}{9}$ D) $\frac{2}{8}$

226) $\frac{1}{3} \cdot \frac{4}{7} \cdot \frac{3}{8}$ 226) _____

A) $\frac{7}{32}$ B) $\frac{1}{14}$ C) $\frac{1}{18}$ D) $\frac{2}{7}$

227) $1\frac{1}{8} \div \frac{1}{8}$ 227) _____

A) 10 B) 9 C) 8 D) $7\frac{1}{2}$

228) $\frac{17}{7} \div \frac{1}{7}$ 228) _____

A) 18 B) 16 C) $\frac{31}{2}$ D) 17

229) $4\frac{4}{5} \cdot 2\frac{1}{2}$ 229) _____

A) 8 B) 11 C) 6 D) 12

230) $39 \div 3\frac{1}{4}$ 230) _____

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

231) $\frac{19}{5} \cdot \frac{20}{13} \cdot 3$ 231) _____

- A) $\frac{228}{13}$ B) $\frac{76}{13}$ C) $\frac{76}{39}$ D) $\frac{42}{65}$

Solve. Write the answer in simplest form.

232) Find the area of each rectangle. Write the answer in simplest form. Recall that the **area = (length) · (width)**.



2 ft 232) _____

- A) $\frac{1}{2}$ square foot B) $\frac{3}{7}$ square foot C) $\frac{2}{11}$ square foot D) $\frac{6}{33}$ square foot

233) On a recent trip, Asha drove 234 miles on $6\frac{1}{6}$ gallons of gasoline. How many miles per gallon did she average?

233) _____

- A) $37\frac{35}{37}$ miles per gallon B) $234\frac{1}{6}$ miles per gallon
 C) $\frac{37}{1404}$ miles per gallon D) 1443 miles per gallon

234) A rectangular flower bed in front of a building measures $13\frac{1}{3}$ feet by $3\frac{3}{5}$ feet. What is the total area of the flower bed? 234) _____

- A) $39\frac{3}{15}$ square feet B) 49 square feet
 C) 43 square feet D) 48 square feet

235) Julie is saving $\frac{2}{19}$ of her monthly income of \$ 6612 for retirement. How much money is she setting aside each month for retirement? 235) _____

- A) \$ 348 B) \$ 696 C) \$ 62,814 D) \$ 174

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

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

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

153) C
154) D
155) A
156) C
157) A
158) B
159) C
160) A
161) D
162) A
163) C
164) A
165) C
166) C
167) B
168) D
169) A
170) C
171) B
172) B
173) A
174) C
175) C
176) D
177) C
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179) C
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182) D
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200) C
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202) C
203) D

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