Basic College Mathematics 8th edition Tobey Test Bank

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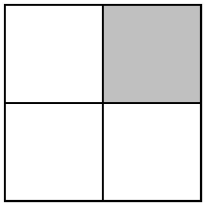
MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

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

1)



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

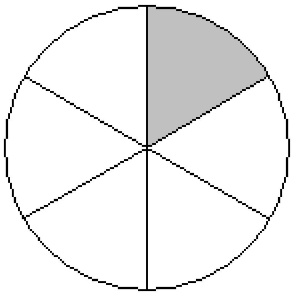
B) $\frac{3}{1}$

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

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

Answer: D

2)



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

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

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

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

Answer: A

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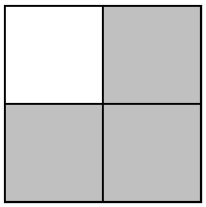
3)



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

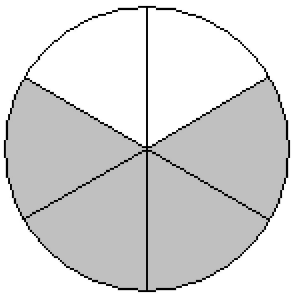
B) $\frac{1}{3}$

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

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

Answer: C

4)



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

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

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

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

Answer: D

5)

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

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

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

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

Answer: C

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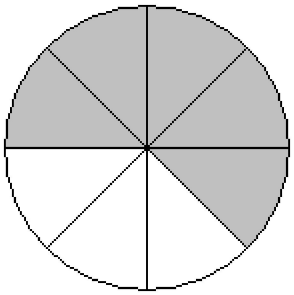
6)



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

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

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

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

Answer: B

7)

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

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

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

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

Answer: D

8)

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

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

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

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

Answer: C

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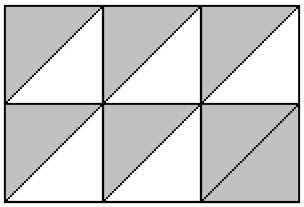
9)



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

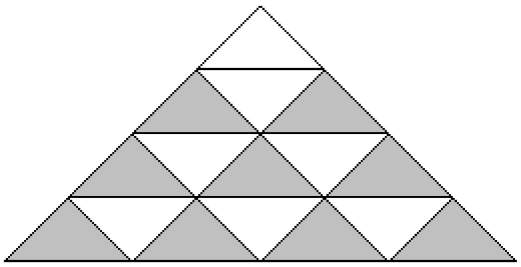
B) $\frac{5}{12}$

C) $\frac{7}{12}$

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

Answer: C

10)



A) $\frac{9}{16}$

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

C) $\frac{7}{16}$

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

Answer: A

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Draw a sketch to illustrate the fractional part.

11) $\frac{4}{7}$ of an object

A)

B)

C)

D)

Answer: C

12) $\frac{3}{8}$ of an object

A)

B)

C)

D)

Answer: A

13) $\frac{5}{8}$ of an object

A)

B)

C)

D)

Answer: B

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14) $\frac{4}{9}$ of an object

A)

B)

C)

D)

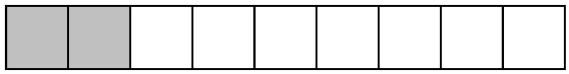
Answer: C

15) $\frac{7}{9}$ of an object

A)

B)

C)



D)

Answer: B

16) $\frac{7}{10}$ of an object

A)

B)

C)

D)

Answer: C

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17) $\frac{3}{10}$ of an object

A)

B)

C)

D)

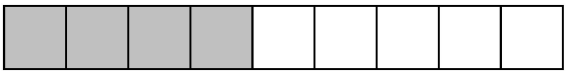
Answer: C

18) $\frac{4}{11}$ of an object

A)

B)

C)



D)

Answer: D

19) $\frac{6}{11}$ of an object

A)

B)

C)

D)

Answer: B

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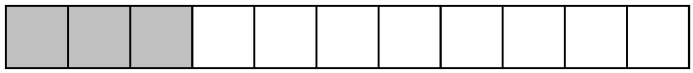
20) $\frac{8}{11}$ of an object

A)

B)

C)

D)



Answer: C

Write the fraction.

21) Of the 227 students at a high school, 58 are juniors. What fraction of the students are juniors?

A) $\frac{58}{227}$

B) $\frac{58}{169}$

C) $\frac{227}{58}$

D) $\frac{169}{58}$

Answer: A

22) Of the 157 students at a high school, 35 are freshmen. What fraction of the students are NOT freshmen?

A) $\frac{157}{122}$

B) $\frac{35}{157}$

C) $\frac{122}{35}$

D) $\frac{122}{157}$

Answer: D

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23) Of the 103 doctors at a hospital, 97 are men. What fraction of the doctors are men?

A) $\frac{97}{103}$

B) $\frac{6}{97}$

C) $\frac{97}{6}$

D) $\frac{103}{97}$

Answer: A

24) Of the 109 executives at a private accounting firm, 50 are women. What fraction of the executives are NOT women?

A) $\frac{109}{59}$

B) $\frac{50}{59}$

C) $\frac{59}{109}$

D) $\frac{59}{50}$

Answer: C

25) According to a recent study, 16 out of 25 visits to a hospital emergency room were for an injury. What fraction of emergency room visits were injury–related?

A) $\frac{25}{16}$

B) $\frac{16}{9}$

C) $\frac{16}{25}$

D) $\frac{9}{16}$

Answer: C

26) According to a recent study, 9 out of 15 visits to a hospital emergency room were for an injury. What fraction of emergency room visits are NOT injury–related?

A) $\frac{6}{9}$

B) $\frac{9}{6}$

C) $\frac{15}{6}$

D) $\frac{6}{15}$

Answer: D

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27) There are 100 centimeters in a meter. What fractional part of a meter does 21 centimeters represent?

A) $\frac{79}{21}$

B) $\frac{100}{21}$

C) $\frac{21}{100}$

D) $\frac{21}{79}$

Answer: C

28) In a composition class containing 79 students, there are 20 freshmen, 23 sophomores, 9 juniors, and the rest are seniors. What fraction of the class is seniors?

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

B) $\frac{27}{122}$

C) $\frac{79}{27}$

D) $\frac{27}{79}$

Answer: D

29) At Smith's Apple Orchard one day, 56 people were picking apples, 19 people were picking pumpkins, and 25 people were picking raspberries. What fractional part of the people were picking pumpkins?

A) $\frac{19}{81}$

B) $\frac{19}{100}$

C) $\frac{100}{19}$

D) $\frac{56}{100}$

Answer: B

30) At Smith's Apple Orchard one day, 58 people were picking apples, 31 people were picking pumpkins, and 11 people were picking raspberries. What fractional part of the people were picking either apples or pumpkins?

A) $\frac{58}{100}$

B) $\frac{89}{11}$

C) $\frac{31}{100}$

D) $\frac{89}{100}$

Answer: D

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Name the numerator and the denominator in the fraction.

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

A) Numerator 3

Denominator 2

B) Numerator 2

Denominator 3

C) Numerator 5

Denominator 1

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

Denominator 2

Answer: B

Write the number as a product of prime factors.

32) 231

A) $3^2 \times 11$

B) $3 \times 7 \times 11$

C) $7^2 \times 3$

D) 21×11

Answer: B

33) 126

A) $2 \times 3^2 \times 7$

B) 14×3^2

C) $2 \times 3 \times 7$

D) $2^2 \times 3^2 \times 7$

Answer: A

34) 252

A) $3^4 \times 7$

B) $2^4 \times 7$

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

D) $2^3 \times 3^2 \times 7$

Answer: C

35) 249

A) 3^2

B) 3×81

C) $3^2 \times 83$

D) 3×83

Answer: D

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36) 20

A) 4×5
B) 4×2
C) 5^2
D) $2^2 \times 5$

Answer: D

37) 63

A) $3^2 \times 7$
B) 3×7^2
C) $3^3 \times 7$
D) 3×7

Answer: A

38) 7425

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

Answer: B

39) 814

A) $11^2 \times 37$
B) $2 \times 11 \times 37$
C) 22×37
D) $2^2 \times 37$

Answer: B

40) 10

A) $2^2 \times 5$
B) 4×4
C) 2×5
D) 3×7

Answer: C

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Reduce the fraction by finding a common factor in the numerator and in the denominator and dividing by the common factor.

41) $\frac{20}{36}$

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

B) $\frac{20}{36}$

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

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

Answer: D

42) $\frac{44}{55}$

A) $\frac{4}{11}$

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

C) $\frac{44}{55}$

D) $\frac{4}{5}$

Answer: D

43) $\frac{21}{43}$

A) $\frac{21}{43}$

B) $\frac{21}{10}$

C) $\frac{1}{43}$

D) $\frac{10}{21}$

Answer: A

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44) $\frac{30}{70}$

A) $\frac{30}{70}$

B) $\frac{3}{10}$

C) $\frac{10}{7}$

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

Answer: D

45) $\frac{200}{225}$

A) $\frac{25}{9}$

B) $\frac{8}{9}$

C) $\frac{200}{225}$

D) $\frac{8}{25}$

Answer: B

46) $\frac{68}{76}$

A) $\frac{68}{76}$

B) $\frac{17}{19}$

C) $\frac{17}{4}$

D) $\frac{4}{19}$

Answer: B

47) $\frac{132}{156}$

A) $\frac{132}{156}$

B) $\frac{11}{13}$

C) $\frac{12}{13}$

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

Answer: B

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48) $\frac{111}{116}$

A) $\frac{116}{55}$

B) $\frac{55}{58}$

C) $\frac{111}{116}$

D) $\frac{55}{111}$

Answer: C

49) $\frac{224}{436}$

A) $\frac{436}{224}$

B) $\frac{56}{109}$

C) $\frac{145}{74}$

D) $\frac{224}{436}$

Answer: B

50) $\frac{396}{1144}$

A) $\frac{1144}{396}$

B) $\frac{26}{9}$

C) $\frac{9}{26}$

D) $\frac{396}{1144}$

Answer: C

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

51) $\frac{56}{60}$

A) $\frac{2 \times 2 \times 7 \times 7}{2 \times 2 \times 3 \times 5} = \frac{49}{15}$

B) $\frac{2 \times 2 \times 2 \times 7}{2 \times 2 \times 3 \times 5} = \frac{14}{15}$

C) $\frac{2 \times 2 \times 7}{2 \times 3 \times 5} = \frac{14}{15}$

D) $\frac{2 \times 2 \times 2 \times 7}{2 \times 2 \times 2 \times 5} = \frac{7}{3}$

Answer: B

52) $\frac{1512}{156}$

A) $\frac{2 \times 3 \times 3 \times 7}{13} = \frac{126}{13}$

B) $\frac{2 \times 2 \times 2 \times 3 \times 3 \times 3 \times 7}{2 \times 2 \times 3 \times 13} = \frac{126}{13}$

C) $\frac{2 \times 2 \times 2 \times 3 \times 3 \times 3 \times 7}{2 \times 2 \times 3 \times 13} = \frac{1512}{156}$

Answer: B

53) $\frac{21}{84}$

A) $\frac{2 \times 3 \times 7}{2 \times 2 \times 3 \times 7} = \frac{2}{7}$

B) $\frac{2 \times 2 \times 3 \times 7}{2 \times 3 \times 7} = \frac{7}{2}$

C) $\frac{3 \times 7}{2 \times 2 \times 3 \times 7} = \frac{1}{4}$

D) $\frac{1 \times 7}{2 \times 3 \times 7} = \frac{7}{4}$

Answer: C

Solve. Reduce the fraction in your answer.

54) There are 5280 feet in a mile. What fraction of a mile is represented by 144 feet?

A) $\frac{3}{110}$

B) $\frac{3}{107}$

C) $\frac{1}{110}$

D) $\frac{144}{5280}$

Answer: A

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55) There are 100 centimeters in 1 meter. What fraction of a meter is 60 centimeters?

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

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

C) $\frac{60}{100}$

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

Answer: B

56) A company employs 324,000 employees worldwide. About 82,800 employees work in the United States. What fraction of the employees work in the United States?

A) $\frac{23}{900}$

B) $\frac{82{,}800}{324{,}000}$

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

D) $\frac{23}{90}$

Answer: D

57) A company employs 288,000 employees worldwide. About 14,400 employees work in the United States. What fraction of the employees do NOT work in the United States?

A) $\frac{19}{20}$

B) $\frac{14{,}400}{288{,}000}$

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

D) $\frac{273{,}600}{288{,}000}$

Answer: A

58) There are 13,300 employees at a company. If 11,900 are females, what fraction of the employees are females?

A) $\frac{11{,}900}{\text{females}}$

B) $\frac{2}{19}$

C) $\frac{17}{19}$

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

Answer: C

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59) There are 11,200 employees at a company. If 2100 are females, what fraction of the employees are males?

A) $\frac{13}{16}$

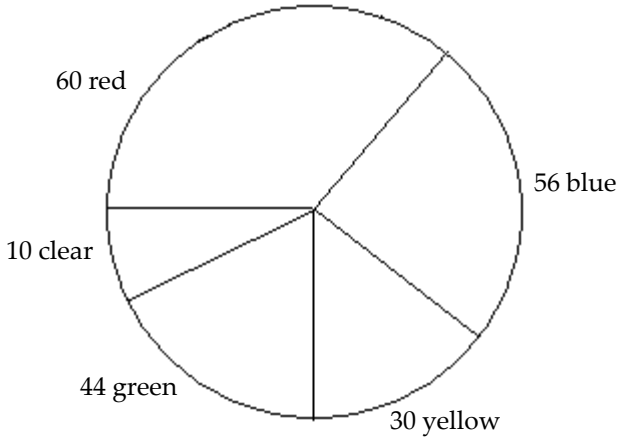
B) $\frac{2100}{11,200}$

C) $\frac{13}{3}$

D) $\frac{3}{16}$

Answer: A

60) 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 Luke has: 60 are red, 56 are blue, 30 are yellow, 44 are green, and 10 are clear. What fraction of the marbles are red? Write the fraction in simplest form.



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

B) $\frac{60}{200}$

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

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

Answer: D

Are these fractions equal?

61) $\frac{6}{8}$ and $\frac{96}{128}$

A) Yes
B) No

Answer: A

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62) $\frac{6}{9}$ and $\frac{42}{90}$

A) No
B) Yes

Answer: A

63) $\frac{2}{3}$ and $\frac{5}{6}$

A) No
B) Yes

Answer: A

64) $\frac{1}{9}$ and $\frac{11}{99}$

A) No
B) Yes

Answer: B

65) $\frac{21}{70}$ and $\frac{18}{60}$

A) Yes
B) No

Answer: A

66) $\frac{9}{21}$ and $\frac{12}{35}$

A) Yes
B) No

Answer: B

Identify if the whole number is prime or composite.

67) 45

A) Prime
B) Composite

Answer: B

68) 47

A) Composite
B) Prime

Answer: B

69) 56

A) Composite
B) Prime

Answer: A

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Change the mixed number to an improper fraction.

70) $5\frac{7}{9}$

A) $\frac{45}{9}$

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

C) $\frac{52}{7}$

D) $\frac{52}{9}$

Answer: D

71) $8\frac{3}{5}$

A) $\frac{40}{3}$

B) $\frac{43}{5}$

C) $\frac{43}{3}$

D) $\frac{40}{5}$

Answer: B

72) $9\frac{2}{3}$

A) $\frac{27}{3}$

B) $\frac{27}{2}$

C) $\frac{29}{2}$

D) $\frac{29}{3}$

Answer: D

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73) $5\frac{3}{4}$

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

B) $\frac{23}{4}$

C) $\frac{20}{4}$

D) $\frac{23}{3}$

Answer: B

74) $21\frac{8}{9}$

A) $\frac{56}{3}$

B) $\frac{197}{9}$

C) 336

D) 37

Answer: B

75) $214\frac{5}{8}$

A) $\frac{1717}{8}$

B) 1070

C) 219

D) $\frac{535}{4}$

Answer: A

Solve.

76) By eating right and exercising regularly, Bob lost $5\frac{2}{5}$ pounds. Change this number to an improper fraction.

A) $\frac{27}{5}$ pounds

B) $\frac{25}{5}$ pounds

C) $\frac{25}{2}$ pounds

D) $\frac{27}{2}$ pounds

Answer: A

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77) The flagpole in front of Jack and Isabelle's house is $17\frac{10}{11}$ feet tall. Change this number to an improper fraction.

A) 27 feet

B) $\frac{170}{11}$ feet

C) $\frac{197}{11}$ feet

D) 170 feet

Answer: C

78) The number of pounds of beef served at Jose's restaurant yesterday was $328\frac{4}{5}$ pounds. Change this number to an improper fraction.

A) 1312 pounds

B) $\frac{1644}{5}$ pounds

C) $\frac{1312}{5}$ pounds

D) 332 pounds

Answer: B

Write the improper fraction as a mixed or whole number.

79) $\frac{40}{3}$

A) $12\frac{1}{7}$

B) $14\frac{1}{3}$

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

D) $13\frac{1}{3}$

Answer: D

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

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

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

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

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

Answer: B

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81) $\frac{11}{2}$

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

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

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

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

Answer: A

82) $\frac{196}{7}$

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

Answer: C

83) $\frac{13}{9}$

A) $13\frac{9}{13}$

B) $1\frac{4}{9}$

C) $\frac{9}{13}$

D) $13\frac{13}{9}$

Answer: B

84) $\frac{152}{7}$

A) $21\frac{5}{7}$

B) $\frac{7}{152}$

C) $152\frac{7}{152}$

D) $152\frac{152}{7}$

Answer: A

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85) $\frac{419}{3}$

A) $2095\frac{419}{3}$

B) $139\frac{2}{3}$

C) $2095\frac{3}{419}$

D) $\frac{3}{419}$

Answer: B

86) $\frac{2016}{14}$

A) 2017

B) $\frac{144}{2}$

C) 144

D) 2015

Answer: C

Solve.

87) A recipe for baking a cake requires $\frac{39}{7}$ cups of flour. Write this as a mixed number.

A) $8\frac{3}{4}$ cups

B) $9\frac{3}{4}$ cups

C) $5\frac{4}{7}$ cups

D) 5 cups

Answer: C

88) James bought $\frac{34}{9}$ gallons of gasoline to fill up his car. Write this as a mixed number.

A) $4\frac{6}{7}$ gallons

B) 3 gallons

C) $3\frac{7}{9}$ gallons

D) $3\frac{6}{7}$ gallons

Answer: C

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Reduce the mixed number.

89) $4\frac{5}{35}$

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

B) $4\frac{5}{7}$

C) $4\frac{7}{5}$

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

Answer: A

90) $8\frac{21}{28}$

A) $8\frac{3}{7}$

B) $8\frac{7}{4}$

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

D) $8\frac{3}{28}$

Answer: C

91) $19\frac{13}{104}$

A) $19\frac{8}{13}$

B) $19\frac{1}{8}$

C) $19\frac{13}{8}$

D) $19\frac{1}{13}$

Answer: B

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92) $15\frac{21}{33}$

A) $15\frac{7}{3}$

B) $15\frac{7}{33}$

C) $15\frac{7}{11}$

D) $15\frac{3}{11}$

Answer: C

Reduce the improper fraction.

93) $\frac{135}{63}$

A) $\frac{15}{7}$

B) $\frac{15}{9}$

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

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

Answer: A

94) $\frac{234}{117}$

A) $\frac{2}{13}$

B) $\frac{26}{13}$

C) 2

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

Answer: C

95) $\frac{94}{10}$

A) $\frac{47}{5}$

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

C) 47

D) $\frac{47}{2}$

Answer: A

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Change to a mixed number and reduce.

96) $\frac{35}{30}$

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

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

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

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

Answer: A

97) $\frac{130}{39}$

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

B) $2\frac{13}{3}$

C) $2\frac{4}{13}$

D) $2\frac{4}{39}$

Answer: A

98) $\frac{360}{21}$

A) $17\frac{3}{7}$

B) $17\frac{1}{3}$

C) $17\frac{7}{3}$

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

Answer: D

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99) $\frac{959}{63}$

A) $15\frac{2}{63}$

B) $15\frac{2}{7}$

C) $15\frac{2}{9}$

D) $15\frac{7}{9}$

Answer: C

Multiply. Write the answer in simplest form.

100) $\frac{2}{5} \times \frac{1}{3}$

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

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

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

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

Answer: D

101) $\frac{8}{10} \times \frac{2}{22}$

A) $\frac{4}{55}$

B) $\frac{5}{16}$

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

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

Answer: A

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102) $\frac{3}{4} \times \frac{1}{7}$

A) $\frac{7}{15}$

B) $\frac{3}{28}$

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

D) $\frac{4}{21}$

Answer: B

103) $\frac{9}{7} \times \frac{1}{19}$

A) $\frac{5}{13}$

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

C) $\frac{9}{133}$

D) $\frac{171}{7}$

Answer: C

104) $\frac{3}{2} \times \frac{3}{21}$

A) $\frac{6}{23}$

B) $\frac{24}{5}$

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

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

Answer: C

105) $\frac{10}{1} \times \frac{14}{18}$

A) $\frac{28}{15}$

B) $\frac{70}{9}$

C) $\frac{90}{7}$

D) $\frac{24}{19}$

Answer: B

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106) $\frac{2}{5} \times \frac{3}{8} \times \frac{3}{4}$

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

B) $\frac{9}{80}$

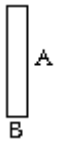
C) $\frac{9}{17}$

D) $\frac{3}{40}$

Answer: B

Solve. Write the answer in simplest form.

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



$A = \frac{4}{11}$ foot

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

A) $\frac{2}{11}$ square foot

B) $\frac{5}{13}$ square foot

C) $\frac{4}{22}$ square foot

D) $\frac{4}{13}$ square foot

Answer: A

108) A recipe calls for $\frac{2}{3}$ of a pound of sausage. How much sausage should be used if only $\frac{1}{2}$ of the recipe is being made?

A) $\frac{4}{3}$ lb

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

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

D) $\frac{2}{5}$ lb

Answer: C

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Multiply. Write the answer in simplest form.

109) $25 \times \frac{2}{5}$

A) 10

B) $\frac{50}{5}$

C) 8

D) $\frac{209}{20}$

Answer: A

110) $\frac{2}{3} \times 5$

A) $\frac{11}{9}$

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

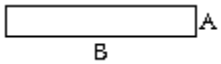
C) $\frac{10}{3}$

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

Answer: C

Solve. Write the answer in simplest form.

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



$A = \frac{2}{5}$ yard

$B = 5$ yards

A) $\frac{10}{5}$ square yards

B) $\frac{7}{5}$ square yards

C) 2 square yards

D) $\frac{27}{5}$ square yards

Answer: C

112) Miara is saving $\frac{3}{14}$ of her monthly income of $5418 for retirement. How much money is she setting aside each month for retirement?

A) $129

B) $1161

C) $387

D) $25,284

Answer: B

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113) Miara's Cinema received \$6045 in movie admission tickets for one day. About $\frac{3}{13}$ of this amount was for G–rated movies. Find the amount of money received from G–rated movies.

A) \$26,195
B) \$155
C) \$465
D) \$1395

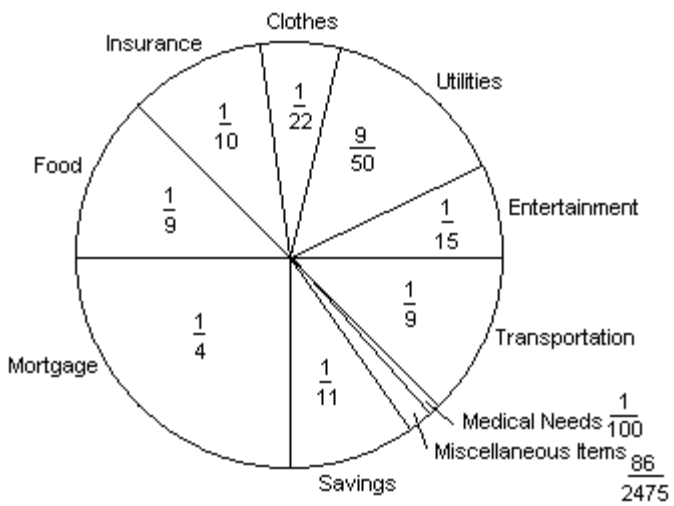
Answer: D

114) In a research study 6517 people were asked which of three cold remedies they were most likely to use, Remedy A, Remedy B, or Remedy C. It was found that $\frac{4}{7}$ of those asked preferred Remedy A. How many of the people asked chose Remedy A?

A) 931 people
B) 532 people
C) 3724 people
D) 2128 people

Answer: C

115) 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 \$2000, how much money did they spend on their insurance? Round to the nearest cent, if necessary.

A) \$90.91
B) \$200.00
C) \$181.82
D) \$20.00

Answer: B

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116) In a typical 54–hour work week, Matthew spends $\frac{1}{3}$ of his time in the office. When he is in the office, he spends $\frac{1}{2}$ of that time on the phone. How many hours each week does Matthew spend on the phone?

A) $\frac{54}{5}$ hours

B) 18 hours

C) 9 hours

D) 27 hours

Answer: C

Multiply. Change any mixed number to an improper fraction before multiplying.

117) $7\frac{1}{2} \times 4$

A) 56

B) $11\frac{1}{2}$

C) 28

D) 30

Answer: D

118) $2 \times 5\frac{9}{14}$

A) $10\frac{9}{14}$

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

C) $11\frac{2}{7}$

D) $11\frac{4}{7}$

Answer: C

119) $3 \times 2\frac{8}{15}$

A) $6\frac{3}{5}$

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

C) 6

D) $6\frac{8}{15}$

Answer: B

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120) $4 \times 5\frac{7}{18}$

A) $20\frac{7}{18}$

B) $9\frac{5}{9}$

C) $21\frac{7}{9}$

D) $21\frac{5}{9}$

Answer: D

121) $2\frac{2}{5} \times \frac{3}{8}$

A) $\frac{9}{10}$

B) $2\frac{9}{10}$

C) $\frac{7}{10}$

D) $2\frac{6}{40}$

Answer: A

122) $6\frac{3}{7} \times 3\frac{1}{9}$

A) 18
B) 16
C) 20
D) 19

Answer: C

123) $1\frac{1}{7} \times \frac{3}{8}$

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

B) $1\frac{3}{56}$

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

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

Answer: C

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124) $1\frac{1}{6} \times 3 \times \frac{2}{5}$

A) $3\frac{5}{12}$

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

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

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

Answer: C

Solve.

125) Find the area of a square if each side measures $4\frac{9}{10}$ inches. Hint: The area of a square is the product of the length times the width.

A) $A = 9\frac{4}{5}$ square inches

B) $A = 240\frac{1}{10}$ square inches

C) $A = 48\frac{1}{50}$ square inches

D) $A = 24\frac{1}{100}$ square inches

Answer: D

126) Maria exercises for $1\frac{2}{9}$ hours every Saturday. She runs for $\frac{3}{5}$ of the time that she exercises. How much time does she spend running every Saturday.

A) $\frac{11}{15}$ hour

B) $2\frac{11}{15}$ hours

C) $\frac{9}{15}$ hour

D) $1\frac{6}{45}$ hours

Answer: A

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127) Byron rode his bicycle $6\frac{13}{16}$ miles on each of 4 days. What is the total distance Byron rode?

A) $24\frac{13}{16}$ miles

B) $10\frac{1}{4}$ miles

C) $27\frac{3}{4}$ miles

D) $27\frac{1}{4}$ miles

Answer: D

128) Jennifer is building some shelves and requires 15 pieces of wood that are each $2\frac{4}{5}$ feet long. What is the total length of wood that Jennifer needs?

A) 42 feet

B) 150 feet

C) $17\frac{4}{5}$ feet

D) 30 feet

Answer: A

129) A rectangular flower bed in front of a building measures $7\frac{1}{2}$ feet by $2\frac{2}{3}$ 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.

A) 17 square feet

B) 21 square feet

C) $14\frac{2}{6}$ square feet

D) 20 square feet

Answer: D

Solve for x.

130) $\frac{2}{3} \cdot x = \frac{6}{7}$

A) $x = \frac{4}{5}$

B) $x = \frac{4}{7}$

C) $x = \frac{9}{14}$

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

Answer: D

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131) $\frac{5}{8} \cdot x = \frac{4}{7}$

A) $x = \frac{3}{5}$

B) $x = \frac{32}{35}$

C) $x = \frac{5}{56}$

D) $x = 11\frac{1}{5}$

Answer: B

Divide, if possible. Write the answer in simplest form.

132) $\frac{3}{8} \div \frac{4}{6}$

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

B) $\frac{9}{32}$

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

D) $\frac{9}{16}$

Answer: D

133) $\frac{3}{5} \div \frac{2}{7}$

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

B) $\frac{6}{35}$

C) $\frac{5}{12}$

D) $\frac{21}{10}$

Answer: D

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134) $\frac{5}{19} \div \frac{5}{13}$

A) $\frac{12}{19}$

B) $\frac{13}{17}$

C) $\frac{13}{19}$

D) $\frac{11}{19}$

Answer: C

135) $\frac{3}{14} \div \frac{7}{16}$

A) $\frac{24}{49}$

B) $\frac{23}{49}$

C) $\frac{22}{49}$

D) $\frac{24}{47}$

Answer: A

136) $\frac{2}{17} \div \frac{5}{16}$

A) $\frac{32}{83}$

B) $\frac{32}{85}$

C) $\frac{31}{85}$

D) $\frac{30}{85}$

Answer: B

137) $\frac{5}{17} \div \frac{3}{10}$

A) $\frac{48}{51}$

B) $\frac{49}{51}$

C) $\frac{50}{51}$

D) $\frac{50}{49}$

Answer: C

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138) $\frac{2}{3} \div \frac{7}{6}$

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

B) 1

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

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

Answer: A

139) $\frac{40}{9} \div \frac{4}{9}$

A) 10

B) 11

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

D) 9

Answer: A

140)

$$\frac{\frac{2}{11}}{\frac{9}{13}}$$

A) $\frac{26}{97}$

B) $\frac{25}{99}$

C) $\frac{26}{99}$

D) $\frac{24}{99}$

Answer: C

141) $0 \div \frac{5}{6}$

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

B) 0

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

D) Undefined

Answer: B

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142) $\frac{5}{8} \div 0$

A) Undefined

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

C) $\frac{5}{8}$

D) 0

Answer: A

143) $1 \div \frac{3}{7}$

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

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

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

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

Answer: C

144) $14 \div \frac{7}{2}$

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

B) 4

C) 3

D) 5

Answer: B

145) $\frac{3}{6} \div 9$

A) $\frac{2}{27}$

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

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

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

Answer: D

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146) $\frac{1}{7} \div 5$

A) $\frac{1}{35}$

B) $\frac{2}{35}$

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

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

Answer: A

Solve.

147) The perimeter of an equilateral triangle (all sides equal) is $\frac{8}{15}$ of a foot. How long is each side?

A) $\frac{45}{8}$ ft

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

C) $\frac{5}{8}$ ft

D) $\frac{8}{45}$ ft

Answer: D

148) How many $\frac{4}{15}$ pound boxes of cereal can be made from 10,800 pound of cereal?

A) 720 boxes
B) 2700 boxes
C) 40,500 boxes
D) 2880 boxes

Answer: C

149) How many $\frac{1}{3}$–ounce doses are available in a 12–ounce container of medicine?

A) $\frac{1}{36}$ dose

B) 36 doses
C) 4 doses
D) 33 doses

Answer: B

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Divide, if possible. Write the answer in simplest form.

150) $4\frac{3}{5} \div 2\frac{1}{9}$

A) $2\frac{17}{94}$

B) $2\frac{17}{95}$

C) $2\frac{18}{95}$

D) $3\frac{17}{95}$

Answer: B

151) $1\frac{3}{8} \div 1\frac{1}{9}$

A) $1\frac{19}{79}$

B) $1\frac{20}{80}$

C) $2\frac{19}{80}$

D) $1\frac{19}{80}$

Answer: D

152) $14 \div 1\frac{3}{4}$

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

B) 8

C) 7

D) 9

Answer: B

153) $2\frac{2}{7} \div 8$

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

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

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

D) $\frac{2}{6}$

Answer: A

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154) $4\frac{1}{2} \div 2\frac{6}{7}$

A) $2\frac{23}{40}$

B) $1\frac{23}{39}$

C) $1\frac{23}{40}$

D) $1\frac{24}{40}$

Answer: C

155) $5\frac{4}{9} \div \frac{1}{9}$

A) 50

B) 49

C) $47\frac{1}{2}$

D) 48

Answer: B

156) $5\frac{5}{9} \div 3\frac{1}{2}$

A) $2\frac{37}{63}$

B) $1\frac{37}{63}$

C) $1\frac{38}{63}$

D) $1\frac{37}{62}$

Answer: B

Solve.

157) On a recent trip, Asha drove 232 miles on $14\frac{1}{6}$ gallons of gasoline. How many miles per gallon did she average?

A) $16\frac{32}{85}$ miles per gallon

B) $541\frac{1}{2}$ miles per gallon

C) $\frac{85}{1392}$ miles per gallon

D) $3286\frac{2}{3}$ miles per gallon

Answer: A

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

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

B) 7 oil lamps

C) 9 oil lamps

D) 8 oil lamps

Answer: D

159) Ted walks around a lake on a path that is $2\frac{7}{8}$ miles long. It takes him $1\frac{4}{5}$ hours to complete his walk. What is his average speed (in miles per hour)?

A) $1\frac{43}{72}$ miles per hour

B) $1\frac{44}{72}$ miles per hour

C) $2\frac{43}{72}$ miles per hour

D) $1\frac{43}{71}$ miles per hour

Answer: A

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

A) $1\frac{11}{20}$ ft

B) $\frac{19}{20}$ ft

C) $23\frac{3}{4}$ ft

D) $4\frac{3}{20}$ ft

Answer: B

Find the value of x.

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

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

B) $x = \frac{2}{3}$

C) $x = \frac{7}{10}$

D) $x = \frac{14}{5}$

Answer: A

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162) $x \div \frac{1}{2} = \frac{23}{17}$

A) $x = \frac{24}{19}$

B) $x = \frac{18}{25}$

C) $x = \frac{23}{34}$

D) $x = \frac{17}{46}$

Answer: C

Find the least common multiple (LCM) of the pair of numbers.

163) 14 and 6

A) 42
B) 168
C) 84
D) 2

Answer: A

164) 18 and 30

A) 3240
B) 18
C) 540
D) 90

Answer: D

165) 15 and 6

A) 30
B) 270
C) 3
D) 90

Answer: A

166) 6 and 7

A) 7
B) 42
C) 6
D) 13

Answer: B

167) 7 and 35

A) 245
B) 7
C) 35
D) 42

Answer: C

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168) 18 and 15

A) 3
B) 33
C) 270
D) 90

Answer: D

Find the LCD for the set of fractions.

169) $\frac{5}{11}, \frac{4}{5}$

A) 16
B) 11
C) 5
D) 55

Answer: D

170) $\frac{5}{8}, \frac{2}{6}$

A) 48
B) 14
C) 2
D) 24

Answer: D

171) $\frac{8}{5}, \frac{2}{45}$

A) 50
B) 5
C) 225
D) 45

Answer: D

172) $\frac{1}{20}, \frac{1}{24}, \frac{1}{30}$

A) 60
B) 120
C) 40
D) 24

Answer: B

173) $\frac{1}{10}, \frac{1}{18}, \frac{13}{45}$

A) 90
B) 45
C) 18
D) 30

Answer: A

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Build the fraction to an equivalent fraction with the denominator specified. State the numerator.

174) $\frac{3}{11} = \frac{?}{88}$

A) 33
B) 3
C) 264
D) 24

Answer: D

175) $\frac{12}{7} = \frac{?}{14}$

A) 24
B) 168
C) 12
D) 84

Answer: A

176) $\frac{1}{7} = \frac{?}{28}$

A) 4
B) 1
C) 5
D) 11

Answer: A

177) $1 = \frac{?}{51}$

A) 1
B) 52
C) 0
D) 51

Answer: D

178) $3 = \frac{?}{4}$

A) 7
B) 3
C) 4
D) 12

Answer: D

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The LCD of the pair of fractions is listed. Build each fraction to an equivalent fraction that has the LCD as the denominator.

179) LCD = 14, $\frac{1}{7}$ and $\frac{7}{2}$

A) $\frac{2}{14}$ and $\frac{49}{14}$

B) $\frac{7}{14}$ and $\frac{14}{14}$

C) $\frac{3}{14}$ and $\frac{14}{14}$

D) $\frac{1}{14}$ and $\frac{7}{14}$

Answer: A

180) LCD = 90, $\frac{7}{10}$ and $\frac{4}{45}$

A) $\frac{63}{90}$ and $\frac{8}{90}$

B) $\frac{14}{90}$ and $\frac{36}{90}$

C) $\frac{7}{90}$ and $\frac{4}{90}$

D) $\frac{16}{90}$ and $\frac{6}{90}$

Answer: A

181) LCD = 36, $\frac{9}{4}$ and $\frac{3}{18}$

A) $\frac{18}{36}$ and $\frac{5}{36}$

B) $\frac{9}{36}$ and $\frac{3}{36}$

C) $\frac{18}{36}$ and $\frac{27}{36}$

D) $\frac{81}{36}$ and $\frac{6}{36}$

Answer: D

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Find the LCD. Build up the fractions to equivalent fractions having the LCD as the denominator.

182) $\frac{2}{9}$ and $\frac{1}{54}$

A) $\frac{108}{486}$ and $\frac{9}{486}$

B) $\frac{56}{486}$ and $\frac{10}{486}$

C) $\frac{18}{54}$ and $\frac{1}{54}$

D) $\frac{12}{54}$ and $\frac{1}{54}$

Answer: D

183) $\frac{3}{8}$ and $\frac{5}{7}$

A) $\frac{10}{15}$ and $\frac{13}{15}$

B) $\frac{21}{56}$ and $\frac{40}{56}$

C) $\frac{21}{15}$ and $\frac{40}{15}$

D) $\frac{10}{56}$ and $\frac{13}{56}$

Answer: B

184) $\frac{17}{18}$ and $\frac{15}{16}$

A) $\frac{25}{144}$ and $\frac{24}{144}$

B) $\frac{272}{288}$ and $\frac{270}{288}$

C) $\frac{136}{144}$ and $\frac{135}{144}$

D) $\frac{33}{288}$ and $\frac{33}{288}$

Answer: C

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185) $\frac{3}{8}, \frac{4}{5}, \frac{1}{40}$

A) $\frac{15}{40}, \frac{32}{40}, \frac{1}{40}$

B) $\frac{120}{320}, \frac{256}{320}, \frac{8}{320}$

C) $\frac{75}{200}, \frac{160}{200}, \frac{5}{200}$

D) $\frac{8}{40}, \frac{12}{40}, \frac{1}{40}$

Answer: A

186) $\frac{1}{9}, \frac{32}{33}, \frac{13}{99}$

A) $\frac{34}{297}, \frac{41}{297}, \frac{16}{297}$

B) $\frac{33}{297}, \frac{288}{297}, \frac{39}{297}$

C) $\frac{11}{99}, \frac{96}{99}, \frac{13}{99}$

D) $\frac{12}{99}, \frac{35}{99}, \frac{13}{99}$

Answer: C

Add or subtract. Simplify the answer.

187) $\frac{18}{62} + \frac{10}{62}$

A) $\frac{15}{32}$

B) $\frac{14}{31}$

C) $\frac{13}{30}$

D) $\frac{13}{31}$

Answer: B

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188) $\frac{1}{9} + \frac{5}{9}$

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

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

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

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

Answer: D

189) $\frac{5}{8} - \frac{4}{8}$

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

B) $\frac{3}{16}$

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

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

Answer: A

190) $\frac{8}{21} - \frac{7}{21}$

A) $\frac{1}{21}$

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

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

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

Answer: A

191) $\frac{25}{59} - \frac{24}{59}$

A) $\frac{1}{59}$

B) $\frac{49}{59}$

C) $\frac{1}{118}$

D) $10\frac{10}{59}$

Answer: A

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192) $\frac{8}{25} - \frac{5}{25}$

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

B) $\frac{3}{25}$

C) $\frac{13}{25}$

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

Answer: B

193) $\frac{25}{42} - \frac{7}{42}$

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

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

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

D) $\frac{16}{21}$

Answer: B

194) $\frac{7}{8} - \frac{3}{8}$

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

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

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

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

Answer: C

195) $\frac{28}{13} - \frac{5}{13}$

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

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

C) $1\frac{10}{13}$

D) $2\frac{7}{13}$

Answer: C

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196) $\frac{48}{70} - \frac{42}{70}$

A) $\frac{3}{70}$

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

C) $28\frac{4}{5}$

D) $\frac{3}{35}$

Answer: D

197) $\frac{4}{7} + \frac{2}{9}$

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

B) $\frac{3}{63}$

C) $\frac{50}{63}$

D) $\frac{50}{8}$

Answer: C

198) $\frac{1}{4} + \frac{1}{8}$

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

B) $\frac{13}{32}$

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

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

Answer: D

199) $\frac{7}{9} - \frac{3}{6}$

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

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

C) $\frac{2}{27}$

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

Answer: B

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200) $\frac{1}{7} - \frac{1}{10}$

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

B) $\frac{1}{70}$

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

D) $\frac{3}{70}$

Answer: D

201) $\frac{5}{7} - \frac{1}{2}$

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

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

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

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

Answer: A

202) $\frac{4}{5} - \frac{3}{20}$

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

B) $\frac{13}{20}$

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

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

Answer: B

203) $\frac{7}{9} - \frac{1}{12}$

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

B) $\frac{25}{36}$

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

D) $\frac{13}{18}$

Answer: B

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204) $\frac{8}{15} - \frac{1}{20}$

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

B) $\frac{7}{15}$

C) $\frac{27}{60}$

D) $\frac{29}{60}$

Answer: D

205) $\frac{7}{12} - \frac{1}{16}$

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

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

C) $\frac{3}{16}$

D) $\frac{25}{48}$

Answer: D

206) $\frac{9}{5} + \frac{9}{9} + \frac{1}{6}$

A) $2\frac{29}{30}$

B) $4\frac{9}{20}$

C) $\frac{19}{20}$

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

Answer: A

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Solve.

207) Kevin read $\frac{3}{14}$ of a book on Monday. He read $\frac{2}{5}$ of the book on Wednesday. What fractional part of the book has Kevin read so far this week?

A) $\frac{5}{19}$ of the book was read

B) $\frac{43}{70}$ of the book was read

C) $\frac{43}{19}$ of the book was read

D) $\frac{5}{70}$ of the book was read

Answer: B

208) David drives for $\frac{1}{15}$ hour to get his friend Tom's house. He then drives $\frac{3}{7}$ hour to get to the bowling alley. How many hours does David spend driving?

A) $\frac{2}{11}$ hour

B) $\frac{2}{105}$ hour

C) $\frac{52}{11}$ hour

D) $\frac{52}{105}$ hour

Answer: D

209) While looking through the properties of her 3 – 1/2 inch diskette, Amy noticed that $\frac{5}{14}$ of the space on the disk was not being used. She deleted four files that were using $\frac{1}{5}$ of the disk space. What fractional part of the disk space was free after she deleted the four files?

A) $\frac{6}{19}$ of the disk was free

B) $\frac{6}{70}$ of the disk was free

C) $\frac{39}{70}$ of the disk was free

D) $\frac{39}{19}$ of the disk was free

Answer: C

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210) A jar is $\frac{7}{9}$ full of olives. Claudia eats $\frac{1}{7}$ of the jar of olives. What fractional part of the jar still contains olives?

A) $\frac{40}{63}$ of the jar contains olives

B) $\frac{2}{3}$ of the jar contains olives

C) $\frac{40}{9}$ of the jar contains olives

D) $\frac{2}{21}$ of the jar contains olives

Answer: A

211) The distance from Ivy's house to the park is $\frac{7}{8}$ of a mile. Ivy leaves her house with her dog and walks $\frac{1}{5}$ of a mile toward the park. How much farther does she have to walk her dog to get to the park?

A) $\frac{3}{4}$ of a mile

B) $\frac{27}{8}$ of a mile

C) $\frac{27}{40}$ of a mile

D) $\frac{3}{20}$ of a mile

Answer: C

Find the value of x in the equation.

212) $x + \frac{1}{2} = \frac{5}{6}$

A) $x = 4$

B) $x = \frac{3}{4}$

C) $x = \frac{4}{3}$

D) $x = \frac{1}{3}$

Answer: D

213) $x - \frac{1}{2} = \frac{2}{3}$

A) $x = \frac{7}{6}$

B) $x = 2$

C) $x = \frac{7}{12}$

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

Answer: A

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214) $x - \frac{3}{8} = \frac{1}{13}$

A) $x = \frac{47}{21}$

B) $x = \frac{4}{104}$

C) $x = \frac{4}{21}$

D) $x = \frac{47}{104}$

Answer: D

Add or subtract. Express the answer as a mixed number.

215)

$$\begin{array}{r} 18\frac{1}{3} \\ +\ 12\frac{1}{6} \\ \hline \end{array}$$

A) $31\frac{1}{2}$

B) $29\frac{1}{2}$

C) $18\frac{1}{2}$

D) $30\frac{1}{2}$

Answer: D

216)

$$\begin{array}{r} 1\frac{5}{9} \\ +\ 13\frac{1}{6} \\ \hline \end{array}$$

A) $1\frac{13}{18}$

B) $14\frac{13}{18}$

C) $15\frac{13}{18}$

D) $13\frac{13}{18}$

Answer: B

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217)

$$\begin{array}{r} 5\frac{5}{8} \\ +\ 7\frac{3}{8} \\ \hline \end{array}$$

A) $13\frac{7}{8}$

B) 12

C) $3\frac{7}{8}$

D) 13

Answer: D

218)

$$\begin{array}{r} 15\frac{1}{7} \\ 6\frac{6}{7} \\ +\ 13\frac{4}{7} \\ \hline \end{array}$$

A) $34\frac{4}{7}$

B) 35

C) $36\frac{4}{7}$

D) $35\frac{4}{7}$

Answer: D

219)

$$\begin{array}{r} 7\frac{1}{8} \\ 4\frac{1}{2} \\ +\ \frac{1}{2} \\ \hline \end{array}$$

A) $13\frac{1}{8}$

B) $12\frac{1}{2}$

C) $11\frac{1}{8}$

D) $12\frac{1}{8}$

Answer: D

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220) $14\frac{2}{3} + 5\frac{1}{6}$

A) $20\frac{5}{6}$

B) $19\frac{5}{6}$

C) $18\frac{5}{6}$

D) $14\frac{5}{6}$

Answer: B

221) $11\frac{3}{8} + 19\frac{1}{5}$

A) $31\frac{23}{40}$

B) $29\frac{23}{40}$

C) $11\frac{23}{40}$

D) $30\frac{23}{40}$

Answer: D

222) $2\frac{4}{5} + 4\frac{1}{5}$

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

B) 6

C) $7\frac{4}{5}$

D) 7

Answer: D

Solve the problem.

223) Chris rode her bicycle $4\frac{1}{2}$ miles on Tuesday. On Thursday, she rode $19\frac{3}{7}$ miles. What was her total biking distance for those two days?

A) $23\frac{13}{14}$ miles

B) $22\frac{13}{14}$ miles

C) $24\frac{13}{14}$ miles

D) $4\frac{13}{14}$ miles

Answer: A

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224) Kim decided to do some spring cleaning. She spent $4\frac{4}{5}$ hours cleaning her garage on Saturday. The next day she spent $2\frac{1}{5}$ hours cleaning her basement. What was the total amount of time she spent cleaning that weekend?

A) $7\frac{2}{5}$ hours

B) 7 hours

C) $1\frac{2}{5}$ hours

D) 6 hours

Answer: B

225) Jeffery has two packages. One weighs $1\frac{2}{5}$ ounces, and the other weighs $\frac{4}{9}$ ounces. What is the total weight of the two packages?

A) $\frac{28}{45}$ oz

B) $3\frac{1}{14}$ oz

C) $\frac{11}{14}$ oz

D) $1\frac{38}{45}$ oz

Answer: D

Add or subtract. Express the answer as a mixed number.

226) $11\frac{4}{9} - 3\frac{8}{9}$

A) $13\frac{5}{9}$

B) $7\frac{4}{9}$

C) $7\frac{5}{9}$

D) $14\frac{5}{9}$

Answer: C

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227) $10 - 6\frac{7}{9}$

A) $4\frac{7}{9}$

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

C) $4\frac{2}{9}$

D) $9\frac{2}{9}$

Answer: B

228) $12\frac{1}{5} - \frac{18}{20}$

A) $10\frac{3}{10}$

B) $12\frac{3}{10}$

C) 11

D) $11\frac{3}{10}$

Answer: D

229) $38\frac{2}{3} - 25\frac{13}{16}$

A) $12\frac{41}{48}$

B) $11\frac{41}{48}$

C) 12

D) $13\frac{41}{48}$

Answer: A

230) $15\frac{5}{16} - 6\frac{3}{8}$

A) $7\frac{15}{16}$

B) 8

C) $8\frac{15}{16}$

D) $9\frac{13}{16}$

Answer: C

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231)

$$\begin{array}{r} 15\frac{2}{7} \\ -\ \ \frac{3}{7} \\ \hline \end{array}$$

A) $14\frac{6}{7}$

B) $13\frac{6}{7}$

C) $14\frac{5}{7}$

D) $15\frac{6}{7}$

Answer: A

232)

$$\begin{array}{r} 12 \\ -\ \ \frac{5}{9} \\ \hline \end{array}$$

A) 11

B) $11\frac{4}{9}$

C) $12\frac{4}{9}$

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

Answer: B

233)

$$\begin{array}{r} 17\frac{7}{25} \\ -\ \ 9\frac{7}{20} \\ \hline \end{array}$$

A) $7\frac{93}{100}$

B) 7

C) $6\frac{95}{100}$

D) $8\frac{93}{100}$

Answer: A

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234)

$$\begin{array}{r} 13\frac{2}{15} \\ -\quad 7\frac{2}{9} \\ \hline \end{array}$$

A) $4\frac{41}{45}$

B) $5\frac{41}{45}$

C) $6\frac{43}{45}$

D) 5

Answer: B

235)

$$\begin{array}{r} 12\frac{2}{9} \\ -\quad 6\frac{5}{6} \\ \hline \end{array}$$

A) $6\frac{7}{18}$

B) $4\frac{5}{18}$

C) 5

D) $5\frac{7}{18}$

Answer: D

Solve the problem.

236) Harry cuts a board $10\frac{1}{6}$ feet long from one 15 feet long. How long is the remaining piece?

A) 5 feet

B) $4\frac{5}{6}$ feet

C) $4\frac{2}{3}$ feet

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

Answer: B

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237) Jerry caught a fish that weighed $18\frac{3}{7}$ pounds. Pat caught a fish that weighed $9\frac{6}{7}$ pounds. How much more did Jerry's fish weigh than Pat's fish?

A) $8\frac{3}{7}$ pounds

B) $27\frac{4}{7}$ pounds

C) $8\frac{4}{7}$ pounds

D) $26\frac{4}{7}$ pounds

Answer: C

238) Angie is wrapping a present for her nephew. She has a roll of wrapping paper that has 10 feet of wrapping paper on the roll. She uses $4\frac{1}{3}$ feet to wrap the present. How many feet of wrapping paper are left on the roll?

A) $6\frac{2}{3}$ feet

B) $6\frac{1}{3}$ feet

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

D) $9\frac{2}{3}$ feet

Answer: C

239) Last week, Samantha ran 11 miles. This week, she ran $9\frac{3}{4}$ miles. How much more did she run last week?

A) $1\frac{16}{39}$ miles

B) $20\frac{3}{4}$ miles

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

D) $12\frac{1}{2}$ miles

Answer: C

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Evaluate using the correct order of operation.

240) $\frac{1}{6} + \frac{1}{5} \times \frac{1}{2}$

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

B) $\frac{16}{15}$

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

D) $\frac{11}{60}$

Answer: C

241) $\frac{7}{8} \div \frac{5}{2} \times \frac{9}{11}$

A) $\frac{315}{176}$

B) $\frac{63}{220}$

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

D) $\frac{77}{180}$

Answer: B

242) $\frac{1}{4} \times \frac{1}{2} + \frac{3}{7} \times \frac{1}{2}$

A) $\frac{101}{120}$

B) $\frac{38}{21}$

C) $\frac{19}{56}$

D) $\frac{19}{28}$

Answer: C

243) $\frac{5}{8} \times \left(\frac{1}{8} + \frac{1}{4}\right) \times \frac{32}{5}$

A) 3

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

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

D) 1

Answer: C

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244) $\left(\frac{2}{5}\right)^2 \times \frac{1}{2}$

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

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

C) $\frac{4}{125}$

D) $\frac{4}{5}$

Answer: C

245) $\left(\frac{1}{2}\right)^3 \times \left(\frac{2}{3}\right)^2$

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

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

C) $\frac{2}{9}$

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

Answer: B

246) $2 + \left(\frac{4}{3}\right)^2 - \frac{5}{7}$

A) $2\frac{13}{21}$

B) $4\frac{13}{21}$

C) $3\frac{4}{63}$

D) $\frac{31}{63}$

Answer: C

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247) $\left(\frac{1}{4}+\frac{1}{16}\right)\times 1$

A) $\frac{5}{16}$

B) $\frac{5}{64}$

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

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

Answer: A

248) $\frac{5}{3}\div\left(\frac{9}{7}+\frac{9}{28}\right)$

A) $\frac{35}{27}$

B) $\frac{28}{27}$

C) $\frac{14}{135}$

D) $\frac{70}{81}$

Answer: B

249) $\left(\frac{3}{7}\right)^2\div\left(\frac{3}{7}-\frac{1}{13}\right)$

A) $\frac{288}{4459}$

B) $\frac{117}{32}$

C) $\frac{32}{91}$

D) $\frac{117}{224}$

Answer: D

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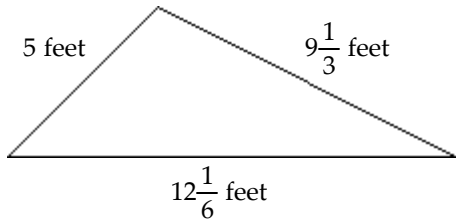
Solve the problem.

250) Find the perimeter of the triangle.



A) $52\frac{1}{9}$ feet

B) $26\frac{1}{9}$ feet

C) $26\frac{1}{2}$ feet

D) $26\frac{2}{9}$ feet

Answer: C

251) Jody is using a recipe that calls for $\frac{1}{3}$ cup of milk per batch. If she has $4\frac{1}{3}$ cups of milk available, how many batches can she make?

A) 26 batches
B) 13 batches
C) 14 batches
D) 10 batches

Answer: B

252) A recipe for cookies calls for $2\frac{5}{6}$ cups of flour. If you are only making a half–batch, how much flour would you need?

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

B) $2\frac{5}{12}$ cups

C) $1\frac{5}{12}$ cups

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

Answer: C

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253) A recipe for fudge brownies calls for $3\frac{3}{8}$ cups of cocoa per batch. If you are making $2\frac{1}{2}$ batches, how many cups of cocoa are needed?

A) $5\frac{7}{8}$ cups

B) $8\frac{7}{16}$ cups

C) $2\frac{1}{8}$ cups

D) $2\frac{13}{16}$ cups

Answer: B

254) A plumber has a 15–ft piece of PVC pipe. He needs to cut the pipe into sections $\frac{1}{3}$–ft long. How many sections will he be able to cut from the pipe?

A) 5
B) 45
C) 44
D) 46

Answer: B

255) A pair of boards needs adjustment. One board is 51 inches and the other is $45\frac{9}{16}$ inches. Find how much the longer board should be shortened to make both boards the same length.

A) $6\frac{9}{16}$ in.

B) $96\frac{9}{16}$ in.

C) $2\frac{23}{32}$ in.

D) $5\frac{7}{16}$ in.

Answer: D

256) Robert and Paul each took some chips from a bag of potato chips which contains $15\frac{1}{2}$ ounces of chips. Robert took $2\frac{1}{3}$ ounces of chips and Paul took $1\frac{5}{6}$ ounces of chips. How many ounces of chips were left in the bag?

A) $12\frac{2}{3}$ ounces

B) $13\frac{2}{3}$ ounces

C) $12\frac{1}{3}$ ounces

D) $11\frac{1}{3}$ ounces

Answer: D

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257) The car Colleen is driving gets $23\frac{1}{3}$ miles per gallon of gas. She used $3\frac{1}{5}$ gallons of gas going from her home to her grandparents' home. She used another $2\frac{9}{10}$ gallons traveling from her grandparents' home to her cousin's apartment. What was the total distance Colleen drove?

A) 140 miles

B) $142\frac{1}{3}$ miles

C) $109\frac{2}{3}$ miles

D) $95\frac{17}{30}$ miles

Answer: B

258) To get credit for graduation, Brittany completed 20 hours of community service. She worked at a soup kitchen for $\frac{3}{8}$ of the time. She picked up litter along highways for $\frac{1}{4}$ of the time. The rest of the hours she spent tutoring younger children after school. How much time did Brittany spend tutoring?

A) $7\frac{1}{2}$ hours

B) $9\frac{1}{2}$ hours

C) $8\frac{1}{2}$ hours

D) 8 hours

Answer: A

259) Elizabeth is making matching holiday outfits for herself and her 3 children. Elizabeth's outfit requires $2\frac{9}{16}$ yds of fabric and each child's outfit requires $\frac{7}{8}$ yds. She finds a 5–yd remnant on sale. Is this enough material to make all 4 outfits? If not, how much more material is needed?

A) No; $\frac{3}{16}$ yds

B) Yes

Answer: A

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Solve.

260) Write a fraction to represent the shaded part of the object.

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

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

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

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

Answer: A

261) There are 209 students at a high school, 46 students are freshmen. Write a fraction that describes the number of students that are NOT freshmen.

A) $\frac{209}{163}$

B) $\frac{163}{46}$

C) $\frac{163}{209}$

D) $\frac{46}{209}$

Answer: C

Reduce the fraction.

262) $\frac{24}{56}$

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

B) $\frac{8}{7}$

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

D) $\frac{24}{56}$

Answer: A

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263) $\frac{30}{50}$

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

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

C) $\frac{3}{10}$

D) $\frac{30}{50}$

Answer: A

264) $\frac{270}{234}$

A) $\frac{18}{13}$

B) $\frac{15}{13}$

C) $\frac{15}{18}$

D) $\frac{270}{234}$

Answer: B

Change to an improper fraction.

265) $5\frac{7}{9}$

A) $\frac{52}{9}$

B) $\frac{45}{9}$

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

D) $\frac{52}{7}$

Answer: A

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Change to a mixed number.

266) $\frac{119}{5}$

A) $119\frac{119}{5}$

B) $119\frac{5}{119}$

C) $\frac{5}{119}$

D) $23\frac{4}{5}$

Answer: D

Multiply.

267) $15 \times \frac{4}{5}$

A) 16
B) 12
C) $\frac{60}{5}$

D) $\frac{229}{80}$

Answer: B

268) $\frac{3}{5} \times \frac{1}{8}$

A) $\frac{1}{40}$

B) $\frac{4}{13}$

C) $\frac{3}{13}$

D) $\frac{3}{40}$

Answer: D

269) $4\frac{4}{5} \times 3\frac{1}{3}$

A) 15
B) 16
C) 12
D) 10

Answer: B

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Divide.

270) $\frac{5}{6} \div \frac{1}{8}$

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

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

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

D) $\frac{5}{48}$

Answer: B

271) $\frac{10}{8} \div \frac{23}{21}$

A) $\frac{33}{29}$

B) $\frac{115}{84}$

C) $\frac{105}{92}$

D) 1

Answer: C

272) $1\frac{7}{8} \div 1\frac{3}{5}$

A) $1\frac{11}{64}$

B) $1\frac{11}{63}$

C) $2\frac{11}{64}$

D) $1\frac{12}{64}$

Answer: A

273) $5\frac{5}{9} \div 10$

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

B) $\frac{5}{9}$

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

D) $\frac{6}{9}$

Answer: B

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Find the least common denominator for the set of fractions.

274) $\frac{7}{9}$ and $\frac{3}{21}$

A) 30
B) 189
C) 3
D) 63

Answer: D

275) $\frac{7}{9}$ and $\frac{5}{63}$

A) 567
B) 63
C) 9
D) 72

Answer: B

276) $\frac{1}{10}, \frac{1}{12}, \frac{2}{5}$

A) 12
B) 20
C) 60
D) 30

Answer: C

Build the fraction to an equivalent fraction with the specified denominator. State the numerator.

277) $\frac{3}{15} = \frac{?}{45}$

A) 3
B) 45
C) 9
D) 135

Answer: C

Add or subtract.

278) $\frac{3}{4} - \frac{5}{8}$

A) $\frac{1}{32}$

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

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

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

Answer: D

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279) $\frac{4}{13} + \frac{2}{15}$

A) $\frac{86}{195}$

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

C) $\frac{86}{14}$

D) $\frac{3}{195}$

Answer: A

280) $\frac{8}{10} + \frac{2}{5} + \frac{7}{12}$

A) $\frac{17}{27}$

B) $1\frac{47}{60}$

C) $3\frac{26}{27}$

D) $\frac{17}{60}$

Answer: B

281) $7\frac{5}{6} + 8\frac{1}{9}$

A) $7\frac{17}{18}$

B) $16\frac{17}{18}$

C) $15\frac{17}{18}$

D) $14\frac{17}{18}$

Answer: C

282) $13\frac{1}{7} - \frac{12}{21}$

A) 12

B) $13\frac{4}{7}$

C) $12\frac{4}{7}$

D) $11\frac{4}{7}$

Answer: C

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Evaluate using the correct order of operations.

283) $\frac{9}{4} \div \frac{2}{11} \times \frac{8}{3}$

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

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

C) 33

D) $\frac{297}{64}$

Answer: C

284) $\left(\frac{3}{2} + \frac{3}{4}\right) \times \frac{1}{2}$

A) $\frac{9}{8}$

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

C) $\frac{9}{2}$

D) $\frac{9}{16}$

Answer: A

Solve.

285) A rectangular flower bed in front of a building measures $40\frac{1}{2}$ feet by $1\frac{1}{3}$ 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.

A) 42 square feet

B) 55 square feet

C) 54 square feet

D) $40\frac{1}{6}$ square feet

Answer: C

286) Jody is using a recipe that calls for $\frac{1}{2}$ cup of milk per batch. If she has $6\frac{1}{2}$ cups of milk available, how many batches can she make?

A) 14 batches

B) 26 batches

C) 13 batches

D) 10 batches

Answer: C

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287) A jar is $\frac{6}{7}$ full of olives. Claudia eats $\frac{5}{9}$ of the jar of olives. What fractional part of the jar still contains olives?

A) $\frac{1}{7}$ of the jar contains olives

B) $\frac{19}{63}$ of the jar contains olives

C) $\frac{1}{63}$ of the jar contains olives

D) $\frac{19}{7}$ of the jar contains olives

Answer: B

288) Chris rode her bicycle $17\frac{1}{3}$miles on Tuesday. On Thursday, she rode $2\frac{2}{5}$ miles. What was her total biking distance for those two days?

A) $17\frac{11}{15}$ miles

B) $20\frac{11}{15}$ miles

C) $19\frac{11}{15}$ miles

D) $18\frac{11}{15}$ miles

Answer: C

289) To get credit for graduation, Brittany completed 20 hours of community service. She worked at a soup kitchen for $\frac{1}{7}$ of the time. She picked up litter along highways for $\frac{1}{5}$ of the time. The rest of the hours she spent tutoring younger children after school. How much time did Brittany spend tutoring?

A) $13\frac{9}{14}$ hours

B) $13\frac{1}{7}$ hours

C) $15\frac{1}{7}$ hours

D) $14\frac{1}{7}$ hours

Answer: B

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

A) 9 oil lamps

B) $6\frac{1}{2}$ oil lamps

C) 7 oil lamps

D) 8 oil lamps

Answer: D

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