

**SHORT ANSWER.** Write the word or phrase that best completes each statement or answers the question.

1) Identify the numerator and the denominator.  $\frac{7}{4}$  1) \_\_\_\_\_

2) Write the fraction as a division problem and simplify, if possible.  $\frac{5}{1}$  2) \_\_\_\_\_

3) Write the fraction as a division problem and simplify, if possible.  $\frac{9}{9}$  3) \_\_\_\_\_

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

4) Write the fraction as a division problem and simplify, if possible.  $\frac{0}{4}$  4) \_\_\_\_\_

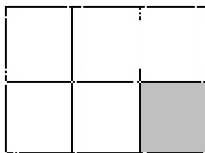
- A)  $4 \div 0; 0$
- B)  $0 \div 4; 0$
- C)  $0 \div 4; \text{undefined}$
- D)  $4 \div 0; \text{undefined}$

5) Write the fraction as a division problem and simplify, if possible.  $\frac{4}{0}$  5) \_\_\_\_\_

- A)  $4 \div 0; 0$
- B)  $4 \div 0; \text{undefined}$
- C)  $0 \div 4; \text{undefined}$
- D)  $0 \div 4; 0$

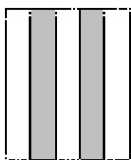
**SHORT ANSWER.** Write the word or phrase that best completes each statement or answers the question.

6) Write a fraction that represents the shaded area. 6) \_\_\_\_\_



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

7) Write a fraction that represents the shaded area. 7) \_\_\_\_\_



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

**SHORT ANSWER. Write the word or phrase that best completes each statement or answers the question.**

8) A class has 23 children, 8 girls and 15 boys. What fraction of the class is made up of boys? 8) \_\_\_\_\_

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

9) Label the fraction as proper or improper.  $\frac{4}{9}$  9) \_\_\_\_\_

A) proper

B) improper

10) Label the fraction as proper or improper.  $\frac{6}{6}$  10) \_\_\_\_\_

A) proper

B) improper

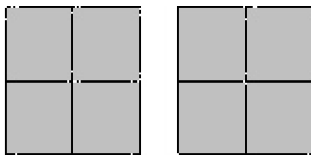
11) Label the fraction as proper or improper.  $\frac{11}{6}$  11) \_\_\_\_\_

A) proper

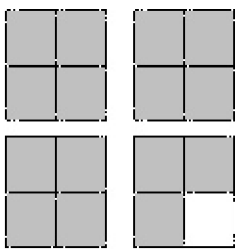
B) improper

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12) Write an improper fraction for the shaded portion of the group of figures. 12) \_\_\_\_\_



13) Write an improper fraction and a mixed number for the shaded portion of the group of figures. 13) \_\_\_\_\_



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

14) Convert the mixed number to an improper fraction.  $3\frac{5}{6}$  14) \_\_\_\_\_

A)  $\frac{25}{6}$

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

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

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

**SHORT ANSWER.** Write the word or phrase that best completes each statement or answers the question.

15) Convert the mixed number to an improper fraction.  $16\frac{5}{9}$  15) \_\_\_\_\_

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

16) Convert the improper fraction to a mixed number.  $\frac{16}{7}$  16) \_\_\_\_\_

- A)  $2\frac{2}{7}$                       B)  $7\frac{1}{16}$                       C)  $2\frac{1}{8}$                       D)  $16\frac{1}{7}$

17) Convert the improper fraction to a mixed number.  $\frac{43}{9}$  17) \_\_\_\_\_

- A)  $36\frac{7}{9}$                       B)  $1\frac{7}{9}$                       C)  $\frac{7}{9}$                       D)  $4\frac{7}{9}$

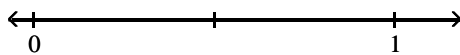
**SHORT ANSWER.** Write the word or phrase that best completes each statement or answers the question.

18) Convert the improper fraction to a mixed number.  $\frac{35}{9}$  18) \_\_\_\_\_

19) Divide. Write the quotient as a mixed number.  $10\overline{)737}$  19) \_\_\_\_\_

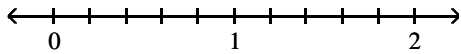
20) Divide. Write the quotient as a mixed number.  $3191 \div 16$  20) \_\_\_\_\_

21) Plot the fraction on the number line.  $\frac{4}{5}$  21) \_\_\_\_\_

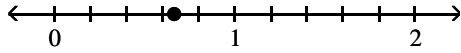


**MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.**

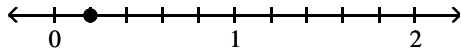
22) Plot the fraction on the number line.  $\frac{4}{5}$  22) \_\_\_\_\_



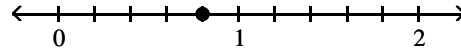
A)



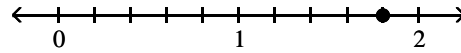
C)



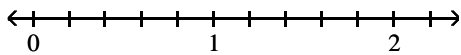
B)



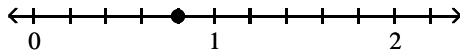
D)



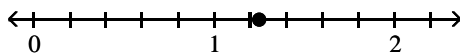
23) Plot the fraction on the number line.  $\frac{5}{4}$  23) \_\_\_\_\_



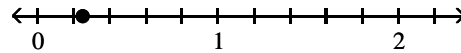
A)



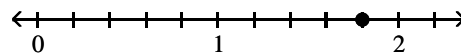
C)



B)



D)



**SHORT ANSWER. Write the word or phrase that best completes each statement or answers the question.**

24) Find two different factorizations of 25. 24) \_\_\_\_\_

25) Find two factors whose product is 30 and whose sum is 13. 25) \_\_\_\_\_

26) Determine if the number 75 is divisible by 26) \_\_\_\_\_  
 a. 2    b. 3    c. 5    d. 10

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

27) Determine if the number is divisible by 2. 27) \_\_\_\_\_

87

A) no

B) yes

**SHORT ANSWER. Write the word or phrase that best completes each statement or answers the question.**

28) Determine if the number 2475 is divisible by 28) \_\_\_\_\_

a. 2    b. 3    c. 5    d. 10

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

- 29) A teacher has 34 students in her class. Can she distribute a package of 70 candies evenly to her students? 29) \_\_\_\_\_  
A) no B) yes
- 30) The number 31 is \_\_\_\_\_. 30) \_\_\_\_\_  
A) prime  
B) composite  
C) neither prime nor composite
- 31) The number 1 is \_\_\_\_\_. 31) \_\_\_\_\_  
A) composite  
B) prime  
C) neither prime nor composite
- 32) The number 0 is \_\_\_\_\_. 32) \_\_\_\_\_  
A) neither prime nor composite  
B) composite  
C) prime
- 33) True or false? 59 is a composite number. 33) \_\_\_\_\_  
A) True B) False
- 34) Determine whether or not the factorization  $90 = 3 \cdot 3 \cdot 10$  represents the prime factorization. If not, explain why. 34) \_\_\_\_\_  
A) No, 90 does not equal  $3 \cdot 3 \cdot 10$  B) No, 10 is not a prime number.  
C) No, 3 appears twice. D) Yes.

**SHORT ANSWER. Write the word or phrase that best completes each statement or answers the question.**

- 35) Find the prime factorization of 41. 35) \_\_\_\_\_
- 36) Find the prime factorization of 40. 36) \_\_\_\_\_
- 37) Find the prime factorization of 225. 37) \_\_\_\_\_

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

- 38) List all of the factors of the number. 38) \_\_\_\_\_  
9  
A) 3, 9 B) 1, 3 C) 1, 3, 9 D) 1, 9

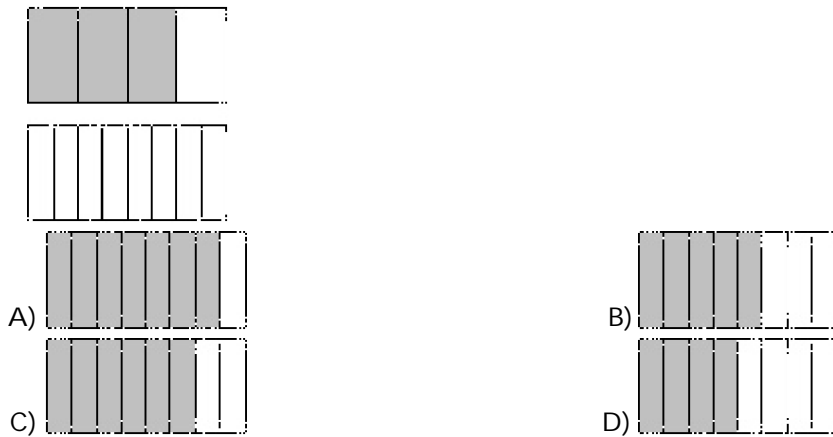
39) List all of the factors of the number. 39) \_\_\_\_\_  
 14  
 A) 1, 2, 14                      B) 1, 14                      C) 1, 2, 7, 14                      D) 1, 2, 7

40) List all of the factors of the number. 40) \_\_\_\_\_  
 37  
 A) 6, 37                      B) 1, 6, 37                      C) 37                      D) 1, 37

41) List all of the factors of the number. 41) \_\_\_\_\_  
 117  
 A) 3, 9, 13, 39                      B) 1, 3, 9, 13, 39, 117  
 C) 1, 3, 9, 13, 39                      D) 1, 3, 13, 117

42) List all of the factors of the number. 42) \_\_\_\_\_  
 83  
 A) 1, 9, 83                      B) 9, 83                      C) 1, 83                      D) 83

43) Shade the second figure so that it expresses a fraction equivalent to the first figure. 43) \_\_\_\_\_



44) True or false? The fractions  $\frac{1}{8}$  and  $\frac{8}{1}$  are equivalent. 44) \_\_\_\_\_  
 A) True                      B) False

45) Determine if the fractions are equivalent. Then fill in the blank with either = or  $\neq$ . 45) \_\_\_\_\_  
 $\frac{3}{4} \text{ --- } \frac{17}{24}$   
 A) =                      B)  $\neq$

46) Determine if the fractions are equivalent. Then fill in the blank with either = or  $\neq$ . 46) \_\_\_\_\_  
 $\frac{1}{7} \text{ — } \frac{7}{49}$

A)  $\neq$  B) =

47) Determine if the fractions are equivalent. Then fill in the blank with either = or  $\neq$ . 47) \_\_\_\_\_  
 $\frac{9}{24} \text{ — } \frac{3}{8}$

A)  $\neq$  B) =

**SHORT ANSWER. Write the word or phrase that best completes each statement or answers the question.**

48) Simplify the fraction to lowest terms. Write the answer as a fraction or whole number. 48) \_\_\_\_\_  
 $\frac{54}{9}$

49) Simplify the fraction to lowest terms. Write the answer as a fraction or whole number. 49) \_\_\_\_\_  
 $\frac{9}{81}$

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

50) Simplify the fraction to lowest terms. Write the answer as a fraction or whole number. 50) \_\_\_\_\_  
 $\frac{12}{20}$   
A)  $\frac{3}{5}$  B)  $\frac{6}{20}$  C)  $\frac{3}{10}$  D)  $\frac{6}{10}$

**SHORT ANSWER. Write the word or phrase that best completes each statement or answers the question.**

51) Simplify the fraction to lowest terms. Write the answer as a fraction or whole number. 51) \_\_\_\_\_  
 $\frac{44}{99}$

52) Simplify the fraction to lowest terms. Write the answer as a fraction or whole number. 52) \_\_\_\_\_  
 $\frac{16}{16}$

53) Simplify the fraction to lowest terms. Write the answer as a fraction or whole number. 53) \_\_\_\_\_  
$$\frac{21}{14}$$

54) Simplify to lowest terms by first reducing the powers of 10. 54) \_\_\_\_\_  
$$\frac{1600}{2000}$$

55) Simplify the fraction to lowest terms. Write the answer as a fraction or whole number. 55) \_\_\_\_\_  
$$\frac{80}{130}$$

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

56) Simplify the fraction to lowest terms. Write the answer as a fraction or whole number. 56) \_\_\_\_\_  
$$\frac{70}{120}$$
  
A)  $\frac{35}{6}$                       B)  $\frac{7}{120}$                       C)  $\frac{7}{12}$                       D) 10

57) Simplify the fraction to lowest terms. Write the answer as a fraction or whole number. 57) \_\_\_\_\_  
$$\frac{9 - 5}{9 + 3}$$
  
A) 1                      B)  $\frac{1}{3}$                       C)  $\frac{7}{6}$                       D)  $\frac{5}{3}$

58)  $\frac{6 - 3}{9 - 9}$  58) \_\_\_\_\_  
A)  $\frac{1}{2}$                       B) 0                      C)  $\frac{1}{6}$                       D) undefined

59) Angel tossed a coin 44 times and heads came up 14 times. What fractional part of the tosses came up heads? What fractional part came up tails? 59) \_\_\_\_\_  
A) heads:  $\frac{7}{22}$ ; tails:  $\frac{15}{22}$                       B) heads:  $\frac{4}{11}$ ; tails:  $\frac{7}{11}$   
C) heads:  $\frac{22}{7}$ ; tails:  $\frac{22}{15}$                       D) heads:  $\frac{15}{22}$ ; tails:  $\frac{7}{22}$



**SHORT ANSWER. Write the word or phrase that best completes each statement or answers the question.**

60) At a raffle, Bill purchased 2 tickets. If 40 tickets were sold, what fraction of the tickets does Bill have? 60) \_\_\_\_\_

61) Allen and Rajiv worked on their homework together. Allen finished 18 of the 30 problems he was assigned, and Rajiv finished 28 of the 35 problems he was assigned. 61) \_\_\_\_\_

a. What fractional part of his total number of homework problems did each boy finish?

b. Which boy finished the greater fractional part?

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

62) Multiply and simplify to lowest terms. Write the answer as a fraction or whole number. 62) \_\_\_\_\_

$$\frac{10}{7} \cdot \frac{28}{5}$$

- A) 8                      B)  $\frac{280}{35}$                       C)  $\frac{56}{7}$                       D)  $\frac{40}{5}$

63) Multiply and write the answer as a fraction. 63) \_\_\_\_\_

$$\left(\frac{2}{9}\right)\left(\frac{4}{5}\right)$$

- A)  $\frac{5}{18}$                       B)  $\frac{4}{7}$                       C)  $\frac{8}{45}$                       D)  $\frac{360}{45}$

**SHORT ANSWER. Write the word or phrase that best completes each statement or answers the question.**

64) Multiply and write the answer as a fraction. 64) \_\_\_\_\_

$$\frac{1}{4} \cdot \frac{5}{9}$$

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

65) Multiply the fractions and simplify to lowest terms. Write the answer as a fraction or whole number. 65) \_\_\_\_\_

$$\left(\frac{8}{7}\right)\left(\frac{4}{3}\right)$$

- A)  $\frac{6}{5}$                       B)  $\frac{32}{21}$                       C)  $\frac{2}{21}$                       D)  $\frac{6}{7}$

**SHORT ANSWER. Write the word or phrase that best completes each statement or answers the question.**

- 66) Multiply and write the answer as a fraction. Write the answer as a fraction or whole number. 66) \_\_\_\_\_

$$9 \cdot \left(\frac{3}{8}\right)$$

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

- 67) Multiply the fractions and simplify to lowest terms. Write the answer as a fraction or whole number. 67) \_\_\_\_\_

$$\frac{2}{7} \cdot 2$$

- A)  $\frac{1}{14}$                       B)  $\frac{1}{7}$                       C)  $\frac{4}{7}$                       D)  $\frac{16}{7}$

- 68) Multiply and simplify to lowest terms. Write the answer as a fraction or whole number. 68) \_\_\_\_\_

$$\left(\frac{32}{5}\right)\left(\frac{35}{20}\right)$$

- A)  $\frac{52}{5}$                       B)  $\frac{56}{5}$                       C)  $\frac{58}{5}$                       D)  $\frac{54}{5}$

**SHORT ANSWER. Write the word or phrase that best completes each statement or answers the question.**

- 69) Multiply and simplify to lowest terms. Write the answer as a fraction or whole number. 69) \_\_\_\_\_

$$\left(\frac{6}{7}\right)\left(\frac{35}{12}\right)$$

- 70) Simplify the power of  $\frac{1}{10}$ . 70) \_\_\_\_\_

$$\left(\frac{1}{10}\right)^7$$

- 71) Simplify. Write the answer as a fraction or whole number 71) \_\_\_\_\_

$$\left(\frac{1}{7}\right)^2$$

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

72) Simplify. Write the answer as a fraction or whole number.

72) \_\_\_\_\_

$$\left(\frac{5}{3}\right)^3$$

A)  $\frac{125}{3}$

B)  $\frac{5}{27}$

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

D)  $\frac{125}{27}$

73) Simplify. Write the answer as a fraction or whole number.

73) \_\_\_\_\_

$$\left(3 \cdot \frac{5}{3}\right)^3$$

A)  $\frac{125}{9}$

B) 27

C)  $\frac{125}{729}$

D) 125

74) Simplify. Write the answer as a fraction or whole number.

74) \_\_\_\_\_

$$\left(\frac{1}{40} \cdot \frac{5}{2}\right)^2$$

A)  $\frac{1}{256}$

B)  $\frac{12}{84}$

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

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

75)  $\frac{175}{24} \cdot \left(\frac{3}{5}\right)^2$

75) \_\_\_\_\_

A)  $\frac{21}{40}$

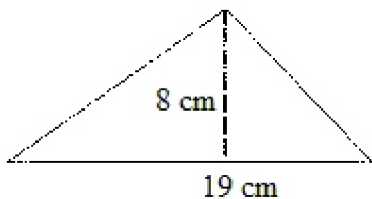
B)  $\frac{21}{8}$

C)  $\frac{181}{34}$

D)  $\frac{178}{29}$

76) Find the area of the figure.

76) \_\_\_\_\_



A) 154 cm<sup>2</sup>

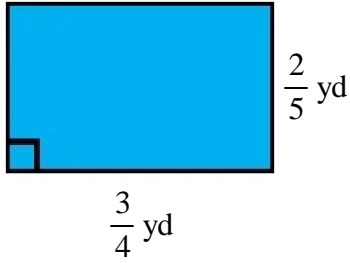
B) 76 cm<sup>2</sup>

C) 74 cm<sup>2</sup>

D) 152 cm<sup>2</sup>

77) Find the area of the figure.

77) \_\_\_\_\_



A)  $\frac{23}{10}$  yd<sup>2</sup>

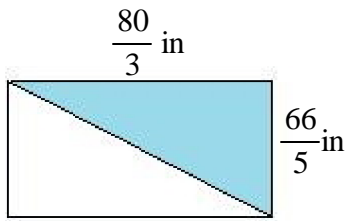
B)  $\frac{23}{20}$  yd<sup>2</sup>

C)  $\frac{3}{10}$  yd<sup>2</sup>

D)  $\frac{3}{5}$  yd<sup>2</sup>

78) Find the area of the shaded region.

78) \_\_\_\_\_



A)  $352$  in<sup>2</sup>

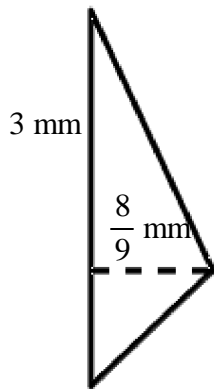
B)  $704$  in<sup>2</sup>

C)  $348$  in<sup>2</sup>

D)  $176$  in<sup>2</sup>

79) Find the area of the figure.

79) \_\_\_\_\_



A)  $\frac{4}{3}$  mm<sup>2</sup>

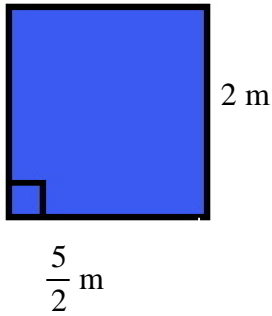
B)  $\frac{8}{3}$  mm<sup>2</sup>

C)  $\frac{8}{27}$  mm<sup>2</sup>

D)  $\frac{4}{27}$  mm<sup>2</sup>

80) Find the area of the figure.

80) \_\_\_\_\_



A)  $5 \text{ m}^2$

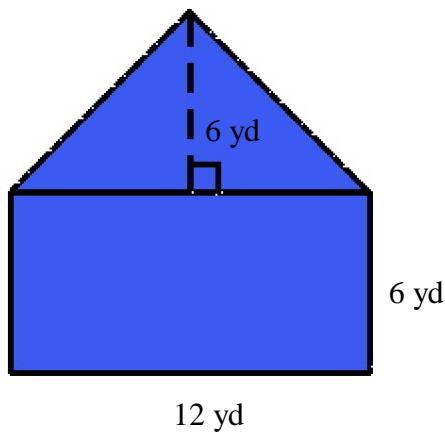
B)  $10 \text{ m}^2$

C)  $\frac{5}{4} \text{ m}^2$

D)  $\frac{5}{2} \text{ m}^2$

81) Find the area of the figure.

81) \_\_\_\_\_



A)  $108 \text{ yd}^2$

B)  $24 \text{ yd}^2$

C)  $144 \text{ yd}^2$

D)  $72 \text{ yd}^2$

82) In a recent survey at a mall,  $\frac{11}{20}$  of the people polled were under the age of 30. If 360 people were surveyed, how many of them were less than 30 years old?

82) \_\_\_\_\_

A) 198 people

B) 171 people

C) 180 people

D) 162 people

83) Molly is saving for a down payment on a house. She has saved \$110 every month for a year. At the end of the year her she spent  $\frac{2}{5}$  of it to help a relative with an unexpected medical expense. How much of the years total did she have left?

83) \_\_\_\_\_

A) \$44

B) \$792

C) \$528

D) \$66

84) Eldon has a 1320 square foot garden. On Saturday he weeds  $\frac{5}{6}$  of it. How many square feet did he weed?

84) \_\_\_\_\_

A)  $1056 \text{ ft}^2$

B)  $264 \text{ ft}^2$

C)  $1100 \text{ ft}^2$

D)  $220 \text{ ft}^2$

85) At a restaurant, all of the tips are put into a fund and each week the chef gets  $\frac{1}{5}$  of the fund and the rest is split evenly over the servers. If the tip fund from last week was \$2280 how much should each of the three servers get? 85) \_\_\_\_\_  
A) \$1824                      B) \$456                      C) \$608                      D) \$152

86) At the beginning of the 2002 season,  $\frac{3}{5}$  of the players on one Major League Baseball team had a salary of over 1 million dollars per year. There are 25 players on a major league roster. How many were making over a million dollars? 86) \_\_\_\_\_  
A) 17                      B) 20                      C) 15                      D) 12

87) A national safety organization has estimated that  $\frac{1}{5}$  of all drivers on the road after midnight on weekends is legally intoxicated. If there are 210 drivers on a stretch of highway during this time period, how many would this organization estimate to be driving while intoxicated? 87) \_\_\_\_\_  
A) 126                      B) 42                      C) 84                      D) 37

**SHORT ANSWER. Write the word or phrase that best completes each statement or answers the question.**

88) Find the reciprocal of the number, if it exists. 88) \_\_\_\_\_  
 $\frac{5}{3}$

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

89) Find the reciprocal of the number, if it exists. 89) \_\_\_\_\_  
3  
A) 3                      B)  $\frac{1}{3}$   
C) 1                      D) No reciprocal exists.

90) Find the reciprocal of the number, if it exists. 90) \_\_\_\_\_  
 $\frac{0}{7}$   
A)  $\frac{7}{0}$                       B) 0  
C) No reciprocal exists.                      D) 7

**SHORT ANSWER.** Write the word or phrase that best completes each statement or answers the question.

91) Fill in the blank.

91) \_\_\_\_\_

Dividing by 7 is the same as multiplying by \_\_\_\_\_.

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

92) Divide and simplify the answer to lowest terms. Write the answer as a fraction or whole number. 92) \_\_\_\_\_

$$\frac{5}{4} \div \frac{1}{4}$$

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

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

C) 5

D) 20

**SHORT ANSWER.** Write the word or phrase that best completes each statement or answers the question.

93) Divide and simplify the answer to lowest terms. Write the answer as a fraction or whole number. 93) \_\_\_\_\_

$$\frac{5}{12} \div \frac{1}{18}$$

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

94) Divide and simplify the answer to lowest terms. Write the answer as a fraction or whole number. 94) \_\_\_\_\_

$$\frac{9}{10} \div \frac{12}{5}$$

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

B)  $\frac{25}{54}$

C)  $\frac{54}{25}$

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

95) Divide and simplify the answer to lowest terms. Write the answer as a fraction or whole number. 95) \_\_\_\_\_

$$\frac{9}{8} \div \left( \frac{9}{2} \right)$$

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

B)  $\frac{11}{17}$

C) 4

D)  $\frac{81}{16}$

**SHORT ANSWER.** Write the word or phrase that best completes each statement or answers the question.

96) Divide and simplify the answer to lowest terms. Write the answer as a fraction or whole number. 96) \_\_\_\_\_

$$\frac{7}{5} \div \frac{7}{5}$$

97) Divide and simplify the answer to lowest terms. Write the answer as a fraction or whole number. 97) \_\_\_\_\_

$$3 \div \frac{2}{9}$$

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

98) Divide and simplify the answer to lowest terms. Write the answer as a fraction or whole number. 98) \_\_\_\_\_

$$\frac{9}{8} \div 3$$

A)  $\frac{27}{8}$

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

C)  $\frac{24}{9}$

D)  $\frac{9}{24}$

99)  $\left(\frac{63}{25}\right) \div \left(\frac{3}{5}\right) \div 7$  99) \_\_\_\_\_

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

B)  $\frac{27}{125}$

C)  $\frac{147}{5}$

D)  $\frac{1323}{125}$

100)  $\frac{7}{20} \div \left(\frac{1}{2}\right)^2$  100) \_\_\_\_\_

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

B)  $\frac{7}{80}$

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

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

101)  $\frac{8}{27} \cdot \left(\frac{3}{4}\right)^2 \div \frac{7}{18}$  101) \_\_\_\_\_

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

B)  $\frac{7}{81}$

C)  $\frac{7}{108}$

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

**SHORT ANSWER. Write the word or phrase that best completes each statement or answers the question.**

102) Joseph must read 28 pages for his literature class and 16 pages for history. If he has read  $\frac{1}{4}$  of the pages, 102) \_\_\_\_\_

- a. How many pages has he read?
- b. How many pages does he still have to read?



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

103) A recipe calls for  $\frac{1}{3}$  cup of water. If the recipe is being tripled, how much water should be used? 103) \_\_\_\_\_

- A) 1 cup                      B)  $\frac{1}{3}$  cup                      C) 3 cups                      D)  $\frac{1}{9}$  cup

104) Joseph exercises 5 times a day for  $\frac{1}{2}$  hours per exercise session. How many hours does he exercise per day? 104) \_\_\_\_\_

- A)  $\frac{5}{2}$  hours per day                      B) 5 hours per day  
C)  $\frac{1}{2}$  hours per day                      D)  $\frac{7}{4}$  hours per day

105) A developer sells residential home sites in  $\frac{3}{4}$ -acre lots. If the developer has 600 acres, how many lots can be sold? 105) \_\_\_\_\_

- A) 400 acres                      B) 450 acres                      C) 900 acres                      D) 800 acres

106) A television station allows 12 minutes of advertising each hour. How many  $\left(\frac{3}{4}\right)$ -minute commercials can be run in 106) \_\_\_\_\_

- a.** 1 hr      **b.** 1 day  
A) **a.** 96 commercials per hr; **b.** 384 commercials per day  
B) **a.** 16 commercials per hr; **b.** 384 commercials per day  
C) **a.** 96 commercials per hr; **b.** 540 commercials per day  
D) **a.** 16 commercials per hr; **b.** 540 commercials per day

107) Multiply. Write the answer as a mixed number or whole number. 107) \_\_\_\_\_

- $4\frac{1}{6} \cdot \frac{3}{5}$   
A)  $2\frac{1}{5}$                       B)  $4\frac{1}{10}$                       C)  $4\frac{2}{5}$                       D)  $2\frac{1}{2}$

108) Multiply. Write the answer as a mixed number or whole number.

108) \_\_\_\_\_

$$2\frac{2}{3} \cdot 0$$

A) Cannot be multiplied.

B) 0

C) 2

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

**SHORT ANSWER. Write the word or phrase that best completes each statement or answers the question.**

109) Multiply. Write the answer as a mixed number or whole number.

109) \_\_\_\_\_

$$\left(4\frac{2}{3}\right)\left(1\frac{1}{4}\right)$$

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

110) Multiply. Write the answer as a mixed number or whole number.

110) \_\_\_\_\_

$$5\frac{1}{3} \cdot 1\frac{1}{4}$$

A)  $6\frac{1}{12}$

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

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

D)  $5\frac{1}{12}$

**SHORT ANSWER. Write the word or phrase that best completes each statement or answers the question.**

111) Multiply. Write the answer as a mixed number or whole number.

111) \_\_\_\_\_

$$\left(5\frac{1}{5}\right) \cdot 5$$

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

112) Divide. Write the answer as a mixed number, proper fraction, or whole number.

112) \_\_\_\_\_

$$3\frac{4}{5} \div \frac{1}{5}$$

A) 19

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

C) 7

D)  $3\frac{4}{25}$

113) Divide. Write the answer as a mixed number, proper fraction, or whole number.

113) \_\_\_\_\_

$$0 \div 4\frac{1}{2}$$

A) 0

B) Cannot be divided.

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

D) 4

**SHORT ANSWER. Write the word or phrase that best completes each statement or answers the question.**

114) Divide. Write the answer as a mixed number, proper fraction, or whole number.

114) \_\_\_\_\_

$$6\frac{1}{4} \div 1\frac{1}{4}$$

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

115) Divide. Write the answer as a mixed number, proper fraction, or whole number.

115) \_\_\_\_\_

$$1\frac{3}{10} \div 3\frac{2}{5}$$

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

B)  $7\frac{3}{20}$

C)  $\frac{13}{34}$

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

**SHORT ANSWER. Write the word or phrase that best completes each statement or answers the question.**

116) Divide. Write the answer as a mixed number, proper fraction, or whole number.

116) \_\_\_\_\_

$$18\frac{7}{10} \div 5\frac{1}{2}$$

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

117) Divide. Write the answer as a mixed number, proper fraction, or whole number.

117) \_\_\_\_\_

$$4\frac{1}{3} \div 3$$

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

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

C) 4

D) 5

**SHORT ANSWER. Write the word or phrase that best completes each statement or answers the question.**

118) Laura's parents pay her \$5 an hour to babysit her little brother. If Laura babysits

118) \_\_\_\_\_

for  $1\frac{2}{5}$  hours, how much will her parents pay her?

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

- 119) Edward's estate is to be split equally among his three heirs. If his estate is worth  $\$2\frac{3}{5}$  million, how much will each heir inherit? 119) \_\_\_\_\_
- A) Each heir will inherit  $\$\frac{11}{15}$  million.      B) Each heir will inherit  $\$\frac{13}{15}$  million.  
C) Each heir will inherit  $\$\frac{8}{15}$  million.      D) Each heir will inherit  $\$\frac{14}{15}$  million.
- 120) Alberta paid about  $\frac{8}{25}$  of her annual salary in federal and state income tax. How much did she pay if her salary was \$80,000? 120) \_\_\_\_\_
- A) Alberta paid \$25,600.      B) Alberta paid \$24,600.  
C) Alberta paid \$23,600.      D) Alberta paid \$26,600.
- 121) A  $16\frac{1}{2}$ -ft wire is cut into 8 pieces of equal length. How long is each piece? 121) \_\_\_\_\_
- A) Each piece is  $2\frac{3}{16}$  ft.      B) Each piece is  $2\frac{1}{8}$  ft.  
C) Each piece is  $2\frac{1}{4}$  ft.      D) Each piece is  $2\frac{1}{16}$  ft.
- 122) If 60 pounds of candy is distributed in  $\frac{3}{4}$ -lb bags, how many bags can be filled? 122) \_\_\_\_\_
- A) 45 bags can be filled.      B) 50 bags can be filled.  
C) 100 bags can be filled.      D) 80 bags can be filled.
- 123) A tutor worked  $12\frac{3}{4}$  hours in a week and earned \$357. What is her hourly rate? 123) \_\_\_\_\_
- A) \$24      B) \$20      C) \$28      D) \$16

124) Jeremy travels  $1\frac{3}{4}$  hours to work each day. If he works 5 days a week, how much time is 124) \_\_\_\_\_ spent traveling to and from work each week?

A) Jeremy spends  $17\frac{1}{4}$  hours each week traveling to and from work.

B) Jeremy spends  $17\frac{1}{2}$  hours each week traveling to and from work.

C) Jeremy spends  $16\frac{1}{2}$  hours each week traveling to and from work.

D) Jeremy spends  $16\frac{1}{4}$  hours each week traveling to and from work.

# Answer Key

Testname: UNTITLED2

1) numerator: 7; denominator 4

2)  $5 \div 1$ ; 5

3)  $9 \div 9$ ; 1

4) B

5) B

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

7) D

8)  $\frac{15}{23}$

9) A

10) B

11) B

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

13)  $\frac{15}{4}$ ;  $3\frac{3}{4}$

14) D

15)  $\frac{149}{9}$

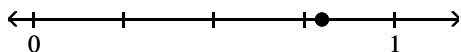
16) A

17) D

18)  $3\frac{8}{9}$

19)  $73\frac{7}{10}$

20)  $199\frac{7}{16}$



21)

$\frac{4}{5}$

22) B

23) C

24)  $5 \cdot 5$  and  $1 \cdot 25$

25) 10 and 3

26) a. no    b. yes    c. yes    d. no

27) A

28) a. no    b. yes    c. yes    d. no

29) A

## Answer Key

Testname: UNTITLED2

30) A

31) C

32) A

33) B

34) B

35) 41 (prime)

36)  $2 \cdot 2 \cdot 2 \cdot 5$

37)  $3 \cdot 3 \cdot 5 \cdot 5$

38) C

39) C

40) D

41) B

42) C

43) C

44) B

45) B

46) B

47) B

48) 6

49)  $\frac{1}{9}$

50) A

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

52) 1

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

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

55)  $\frac{8}{13}$

56) C

57) B

58) D

59) A

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

61) a. Allen:  $\frac{3}{5}$ ; Rajiv:  $\frac{4}{5}$

b. Rajiv finished the greater fractional part.

62) A

63) C

Answer Key

Testname: UNTITLED2

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

65) B

66)  $\frac{27}{8}$

67) C

68) B

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

70)  $\frac{1}{10,000,000}$

71)  $\frac{1}{49}$

72) D

73) D

74) A

75) B

76) B

77) C

78) D

79) A

80) A

81) A

82) A

83) B

84) C

85) C

86) C

87) B

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

89) B

90) C

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

92) C

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

94) D

95) A

96) 1



Answer Key

Testname: UNTITLED2

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

98) B

99) A

100) C

101) D

102) a. Joseph has read 11 pages.

b. Joseph still must read 33 pages.

103) A

104) A

105) D

106) B

107) D

108) B

109)  $5\frac{5}{6}$

110) B

111) 26

112) A

113) A

114) 5

115) C

116)  $3\frac{2}{5}$

117) B

118) Her parents will pay her \$7.

119) B

120) A

121) D

122) D

123) C

124) B