

NAME:

1.  $36,785 - 188 =$

2.  $376 - 360 + 337 =$

3.  $|7| =$

4.  $(25 + 17)(64 - 49) =$

5.  $2,850 \div 190 =$

6.  $500 \times 65 =$

7. What is the value of  $43,254/8$ , rounded to the nearest whole number?

- a. 5,000
- b. 5,400
- c. 5,406
- d. 5,407

8.  $4,563 \times 45 =$

9.  $12(84 - 5) - 3 \times 54 =$

- a. 786
- b. 796
- c. 841
- d. 54,000

10. Which of the following expression is equal to 40,503?

- a.  $400 + 50 + 3$
- b.  $4000 + 500 + 3$
- c.  $40,000 + 50 + 3$
- d.  $40,000 + 500 + 3$

11. Which of the following choices is divisible by both 7 and 8?

- a. 42
- b. 78
- c. 112
- d. 128

12. Which of the following numbers is represented by the prime factors  $2 \times 3 \times 7$ ?

- a. 21
- b. 42
- c. 84
- d. 237

13. 4 pounds 14 ounces - 3 pounds 12 ounces =

- a. 2 pounds 2 ounces
- b. 1 pound 12 ounces
- c. 1 pound 2 ounces
- d. 14 ounces

14. 1 hour 40 minutes + 3 hours 40 minutes =

- a. 4 hours
- b. 4 hours 20 minutes
- c. 5 hours 20 minutes
- d. 5 hours

15. What is the estimated product when 157 and 817 are rounded to the nearest hundred and multiplied?

- a. 160,000
- b. 180,000
- c. 16,000
- d. 80,000

16. Which of the following choices is equivalent to  $6 \times 6 \times 6$ ?

- a.  $3 \times 6$
- b.  $12 \times 6$
- c.  $6^3$
- d.  $3^6$

17. Which of the following represents a composite number?

- a. 11
- b. 29
- c. 41
- d. 91

18.  $17^2 =$

19.  $10^5 / 10^2 =$

- a.  $1^3$
- b.  $10^3$
- c.  $10^7$
- d.  $10^{10}$

20.  $-4^2 =$

- a. -8
- b. 8
- c. -16
- d. 16

21. What is the square root of 36?  
**a.** 2  
**b.** 6  
**c.** 18  
**d.** 1,296
22.  $(-11)^2 =$   
**a.** 121  
**b.** -121  
**c.** -22  
**d.** 22
23. Which of the following is a translation of the statement "Twice the sum of six and four"?  
**a.**  $2 + 6 + 4$   
**b.**  $2 \times 6 + 4$   
**c.**  $2(6 + 4)$   
**d.**  $(2 \times 6) \times 4$
24. A train must travel to a certain town in six days. The town is 3,450 miles away. How many miles must the train average each day to reach its destination?
25. Evaluate the expression:  $|-14| + -5 =$
26. On a certain day, the nurses at a hospital worked the following number of hours: Nurse Jones worked 8 hours; Nurse Bell worked 10 hours; Nurse Sharp worked 9 hours; Nurse Howl worked 8 hours; Nurse Daniels worked 7 hours; and Nurse Milly worked 12 hours. What is the average number of hours worked per nurse on this day?
27. A car uses 16 gallons of gas to travel 448 miles. How many miles per gallon does the car get?  
**a.** 22 miles per gallon  
**b.** 24 miles per gallon  
**c.** 26 miles per gallon  
**d.** 28 miles per gallon
28. A disk shows 827,036 bytes free and 629,352 bytes used. If you delete a file of size 542,159 bytes and create a new file of size 489,986 bytes, how many free bytes will the disk have?  
**a.** 577,179 free bytes  
**b.** 681,525 free bytes  
**c.** 774,863 free bytes  
**d.** 879,209 free bytes
29. A family's gas bill averages \$80 a month for seven months of the year and \$20 a month for the rest of the year. If the family's bills were averaged over the entire year, what would the monthly bill be?
30. What is the supplement of a 75-degree angle? If a vehicle is driven 22 miles on Monday, 25 miles on Tuesday, and 19 miles on Wednesday, what is the average number of miles driven each day?  
**a.** 19 miles  
**b.** 21 miles  
**c.** 22 miles  
**d.** 23 miles
31. Each sprinkler head on an athletic field sprays water at an average of 16 gallons per minute. If 5 sprinkler heads are flowing at the same time, how many gallons of water will be released in 10 minutes?
32. Lefty keeps track of the length of each fish that he catches. Below are the lengths in inches of the fish that he caught one day:  
12, 13, 8, 10, 8, 9, 17  
What is the median fish length that Lefty caught that day?
33. If it takes two workers, working separately but at the same speed, 2 hours and 40 minutes to complete a particular task, about how long will it take one worker, working at the same speed, to complete the same task alone?  
**a.** 1 hour 20 minutes  
**b.** 4 hours 40 minutes  
**c.** 5 hours  
**d.** 5 hours 20 minutes
34. A street sign reads "Loading Zone 15 Minutes." If a truck pulls into this zone at 11:46 A.M., by what time must it leave?
35. A right angle is:
36. An acute angle is:
37. A straight angle is:
38. An Obtuse angle is:

39. An elevator sign reads "Maximum weight 600 pounds." Which of the following may ride the elevator?

- a. three people: one weighing 198 pounds, one weighing 185 pounds, one weighing 200 pounds
- b. one person weighing 142 pounds with a load weighing 500 pounds
- c. one person weighing 165 pounds with a load weighing 503 pounds
- d. three people: one weighing 210 pounds, one weighing 101 pounds, one weighing 298 pounds

40. Frank was hired to teach 3 identical math courses, which entailed being present in the classroom 48 hours altogether. At \$35 per class hour, how much did he earn for teaching 1 course?

- a. \$105
- b. \$560
- c. \$840
- d. \$1,680

41. Howie and Sam got summer jobs at the ice cream shop and were supposed to work 15 hours per week each for 8 weeks. During that time, Sam was ill for one week and Howie took her shifts. How many hours did Howie work during the 8 weeks?

42. Skip went fishing six days in the month of June. He caught 11, 4, 0, 5, 4, and 6 fish respectively. What was Skip's average catch?

- a. 4 fish
- b. 5 fish
- c. 6 fish
- d. 7 fish

43. A clerk can process 26 forms per hour. If 5,600 forms must be processed in an 8-hour day, how many clerks must you hire for that day?

44. How many different meals can be ordered from a restaurant if there is 3 choices of soup, 5 choices of entrées and 2 choices of dessert if a meal consists of a soup, entrée, and dessert?

- a. 10
- b. 15
- c. 30
- d. 60

45. Josh paid \$5.96 for 4 pounds of cookies. How much do the cookies cost per pound?

46. Which of the following best represents the following sentence? Rob (R) had three apples and ate one.

- a.  $R = 3 - 1$
- b.  $3 - 2 = R$
- c.  $R = 3 \times 2$
- d.  $3R - 2$

47. A uniform requires 4 square yards of cloth. To produce uniforms for 84,720 troops, how much cloth is required?

48. Will left his workplace at 5:16 P.M. on Thursday and returned at 7:58 A.M. on Friday. How much time elapsed between the time Will left work on Thursday to the time he returned on Friday?

- a. 2 hours 42 minutes
- b. 13 hours 42 minutes
- c. 14 hours 42 minutes
- d. 14 hours 52 minutes

49. What is the value of the expression  $5(4^0)$ ?

50. Twelve times one-half of a number is thirty six. What is the number?

51. If Linda purchases an item that costs \$30 or less, she will pay with cash. If Linda purchases an item that costs between \$30 and \$70 she will pay with a check. If Linda purchases an item that costs \$70 or greater, she will use a credit card. If Linda recently paid for a certain item using a check, which of the following statements could be true?

- a. The item cost \$80.
- b. If the item had cost \$20 more, she would have paid with cash.
- c. The item cost at least \$70.
- d. The item cost more than \$25.

52. What is the next number in the series below?  
3 16 6 12 12 8 \_\_\_

53. Which number is divisible by 6?

- a. 232
- b. 341
- c. 546
- d. 903

54. Five people in Tom's office are planning a party. Tom will buy a loaf of French bread (\$3 a loaf) and a platter of cold cuts (\$23). Betty will buy the soda (\$1 per person) and two boxes of crackers (\$2 per box). Mark and Rick will split the cost of two packages of Cheese Doodles (\$1 per package). Dan will supply a package of 5 paper plates (\$4 per package). How much more will Tom spend than the rest of the office put together?
55. How many faces does a cube have?
56. The number of red blood corpuscles in one cubic millimeter is about 5,000,000 and the number of white blood corpuscles in one cubic millimeter is about 8,000. What, then, is the ratio of white blood corpuscles to red blood corpuscles?
- a. 1:625  
b. 1:40  
c. 4:10  
d. 5:1,250
57. Which of the following is an irrational number?
- a. 0.333333...  
b.  $\frac{1}{2}$   
c. 10.489  
d. 0.101101110...
58. Find the mode of the following set of numbers:  
8 4 6 12 9 9 4 4
59. Which of the following is a prime number?
- a. 6  
b. 9  
c. 11  
d. 27
60. Which of the following is a translation of the following sentence? Sally (S) is ten years older than Rick (R).
- a.  $10 + S = R$   
b.  $S + R = 10$   
c.  $R - 10 = S$   
d.  $S = R + 10$
61. A dormitory now houses 30 men and allows 42 square feet of space per man. If five more men are put into this dormitory, how much less space will each man have?
62. Land consisting of a quarter section is sold for \$1,850 per acre (1 quarter section = 160 acres). The total sale price is
- a. \$296,000  
b. \$592,000  
c. \$1,184,000  
d. \$1,850,000
63. Write ten thousand four hundred forty-seven in numerals.
64. John has started an egg farm. His chickens produce 480 eggs per day, and his eggs sell for \$2.00 a dozen. How much does John make on eggs per week? (1 week = 7 days)
- a. \$480  
b. \$500  
c. \$560  
d. \$600
65. What is the value of  $5^{-2}$ ?
- a. -10  
b. -25  
c.  $\frac{1}{10}$   
d.  $\frac{1}{25}$
66.  $426 - 7.2 =$
67.  $0.63 \times 0.42 =$
- a. 26.46  
b. 2.646  
c. 0.2646  
d. 0.02646
68. What is six and five hundredths written as a decimal?
69. 56.73647 rounded to the nearest hundredth is equal to
- a. 100  
b. 57  
c. 56.7  
d. 56.74
70. Which number sentence is true?
- a.  $0.43 < 0.043$   
b.  $0.0043 > 0.43$   
c.  $0.00043 > 0.043$   
d.  $0.043 > 0.0043$
71.  $78.09 + 19.367 =$

72.  $3.419 - 0.7 =$

73.  $2.9 \div 0.8758 =$

- a. 3.31
- b. 0.331
- c. 0.302
- d. 0.0302

74.  $195.6 \div 7.2$ , rounded to the nearest hundredth, is equal to:

- a. 271.67
- b. 27.17
- c. 27.16
- d. 2.717

75. If  $2x = 20$ , then  $x$  is

76. If  $3n + 4n = 42$ , then  $n$  is

77. What is six and five hundredths written as a decimal?

- a. 0.065
- b. 6.5
- c. 6.05
- d. 6.005

78. Which of these has a 9 in the thousandths place?

- a. 3.0095
- b. 3.0905
- c. 3.9005
- d. 3.0059

79.  $4.5 \div 2.5 =$

- a. 20.0
- b. 2.0
- c. 1.8
- d. 0.2

80.  $0.216 + 9.3 + 72.0 =$

81. What is another way to write  $7.25 \times 10^3$ ?

- a. 72.5
- b. 725
- c. 7,250
- d. 72,500

82. Which number is NOT between -0.02 and 1.02?

- a. -0.15
- b. -0.015
- c. 0
- d. 0.02

83. What is the result of multiplying 11 by 0.032?

- a. 0.032
- b. 0.0352
- c. 0.32
- d. 0.352

84. Which of the following represents the word form of the decimal 0.007?

- a. seven tenths
- b. seven hundredths
- c. seven thousandths
- d. seven ten-thousandths

85. Cory and Vic begin driving at the same time but in opposite directions. If Cory drives 60 miles per hour, and Vic drives 70 miles per hour, how long will it be before they are 325.75 miles apart?

- a. 2 hours
- b. 2.25 hours
- c. 2.5 hours
- d. 2.75 hours

86. Derrick earns \$10 an hour for walking the neighbor's dog. Today he can only walk the dog for 45 minutes. How much will Derrick make today?

87. My greyhound, Zelda, can run 35.25 miles an hour, while my cat, Spot, can run only  $\frac{1}{3}$  that fast. How many miles per hour can Spot run?

- a. 8.25 miles per hour
- b. 8.77 miles per hour
- c. 8.81 miles per hour
- d. 9.11 miles per hour

88. A 600-page book is 1.5 inches thick. What is the thickness of each page?

- a. 0.0010 inches
- b. 0.0030 inches
- c. 0.0025 inches
- d. 0.0600 inches

89. When both seven and three are taken away from a number the result is 31. What is the number?

90. Pat earns only  $\frac{1}{3}$  of what Roy does. If Roy makes \$21.00 per hour, how much does Pat earn in a typical 8-hour day?

- a. \$56.00
- b. \$112.00
- c. \$168.00
- d. \$7.00

91. Lee is mailing two packages. One weighs 12.9 pounds and the other weighs half as much. What is the total weight in pounds of the two packages?

92. If it takes Danielle 22.4 minutes to walk 1.25 miles, how many minutes will it take him to walk one mile?

- a. 17.92
- b. 18
- c. 19.9
- d. 21.15

93. In the equation  $4p - 10 - 2p = 16$ , what is  $p$  equal to?

94. Hank wants to build a deck that is 8.245 feet by 9.2 feet. How many square feet will the deck be?

(Area = length x width)

- a. 34.9280 square feet
- b. 82.4520 square feet
- c. 17.4450 square feet
- d. 75.8540 square feet

95. Zo has a rectangular frame with an opening that's 11.25 inches by 8.75 inches. What's the area, rounded to the nearest hundredth, of the opening?

- a. 20 square inches
- b. 92.81 square inches
- c. 97.43 square inches
- d. 98.44 square inches

96. Mike's favorite cake recipe calls for 0.75 pounds of flour; he has a 5 pound bag. He wants to make several cakes for the school bake sale. How many cakes can he make?

97. A carpet costs \$2.89 per square foot. How much carpet, rounded to the nearest square foot, could be bought with \$76?

- a. 25 square feet
- b. 26 square feet
- c. 27 square feet
- d. 38 square feet

98. Lilly is going to re-carpet her living room. The dimensions of the room are 15.6 feet by 27.75 feet. How many square feet of carpet will she need?

99. Don is making hats for the kids in the neighborhood. He needs 0.65 yards of fabric for each hat; he has 10 yards of fabric. How many hats can he make?

100. Cat wants to enclose a rectangular area in her backyard for her children's swing set. This section of the yard measures 16.25 feet by 20.25 feet. How many feet of fencing will she need to enclose this section?

- a. 36.5 feet
- b. 52.75 feet
- c. 73 feet
- d. 329.06 feet

101. Jim is driving 46.75 miles per hour. How far will he go in 15 minutes?

- a. 14.78 miles
- b. 11.6875 miles
- c. 12.543 miles
- d. 10.7865 miles

102.  $3 \frac{5}{12} + 2 \frac{7}{8} =$

103. Bob notices that the ratio of boys to the total students in his class is 3:4. If there are 28 students in his class, how many of them are boys?

- a. 7
- b. 14
- c. 21
- d. 24

104. If one inch equals 2.54 centimeters, how many inches are there in 20.32 centimeters?

- a. 7.2
- b. 8
- c. 9
- d. 10.2

105. It takes a typing student 0.75 seconds to type one word. At this rate, how many words can the student type in 60 seconds?

106. About how many quarts of water will a 3.25-liter container hold? (1 liter = 1.06 quarts)

- a. 3.066
- b. 3.045
- c. 3.445
- d. 5.2

107. The Stars played three basketball games last week. Monday's game lasted 113.9 minutes; Wednesday's game lasted 106.7 minutes; Friday's game lasted 122 minutes. What is the average time, in minutes, for the three games?

- a. 77.6
- b. 103.2
- c. 114.2
- d. 115.6

108. Amy earns \$8.30 an hour for the first 40 hours she works each week. For every hour she works overtime, she earns 1.5 times her regular hourly wage. If Amy worked 44 hours last week, how much did she earn?

- a. \$365.20
- b. \$337.50
- c. \$381.80
- d. \$547.80

109. Solve the following equation for  $x$ :  $2x - 7 = 4$

110. What is 7% converted to a fraction =

111.  $0.05 =$  %

112.  $1/4\% =$  %

113.  $1/4 =$  %

114.  $0.97 =$  %

115. What is the value of  $y$  if  $x = 3$  and  $y = 5 + 4x$ ?

116.  $2.06\% =$

- a. 2.06
- b. 0.206
- c. 0.0206
- d. 206

117. 10% converted to a fraction =

118. 350% converted to a mixed number =

119. 24% converted to a fraction =

120.  $3 \frac{1}{6} \times 2 \frac{4}{19} =$

121. 60% of 390 =

122. 42% of 997 =

123. 26% converted to a decimal =

124. 14 percent of 232?

125. What percentage of 18,000 is 234?

126. What percentage of 600 is 750?

127. 62.5% is equal to

- a.  $1/16$
- b.  $5/8$
- c.  $6 \frac{1}{4}$
- d.  $6 \frac{2}{5}$

128.  $1 \frac{5}{8} \div 3 \frac{3}{4} =$

129. What percent of 50 is 12?

130. How much money is a 20% tip on a restaurant bill of \$16?

131. How much money is a 15% tip on a restaurant bill of \$24?

132. What is 44% of 5?

133.  $2 \frac{2}{7} - \frac{3}{4} =$

134. Membership dues at Arnold's Gym are \$53 per month this year, but were \$50 per month last year. What was the percentage increase in the gym's prices?

- a. 5.5%
- b. 6.0%
- c. 6.5%
- d. 7.0%

135. Greg has finished reading 30% of a 340-page novel. How many pages has he read?

- a. 102
- b. 103
- c. 105
- d. 113

136.  $\frac{8}{12} = \frac{?}{3}$

137. If a square has one side that equals 32.5, what is the area of the quadrilateral?

138. Ten students from the 250-student senior class at Jefferson High School have received full college scholarships. What percentage of the senior class received full college scholarships?

- a. 2%
- b. 4%
- c. 10%
- d. 25%

139.  $\frac{5}{9} + \frac{1}{6} =$

140. 80% of 400 =

141. Change  $\frac{4}{25}$  to a percent.

142. A power company gives a  $1 \frac{1}{2}$  % discount if a customer pays the bill at least ten days before the due date. If Sally pays her 48.50 bill ten days early, how much money will she save, rounded to the nearest cent?

143. In the accounting department at a university, 60% of the students are women and 250 of the students are men. How many accounting students are there in all?

144. A pump installed on a well can pump at a maximum rate of 100 gallons per minute. If the pump runs at 50% of its maximum rate for six hours a day, how much water is pumped in one day?

145.  $\frac{3}{7} \times \frac{2}{5} =$

146. The population of Briancon increases at a rate of 3% annually. If the population is currently 2,500, what will the population be at the same time next year?

147. Joe estimates that his college expenses this year will be \$26,000; however, he wishes to add 15% to that amount in case of emergency. How much should Paolo try to add to his college fund?

148. If a triangle has a base of 2.4 and a height of 4.8, what is the area of the polygon?

149.  $\frac{5}{8} \div \frac{3}{5} =$

150.  $\frac{7}{10} - \frac{2}{9} =$

151. What is the complement of a 34-degree angle?

152. Convert  $\frac{7}{40}$  to a percentage.