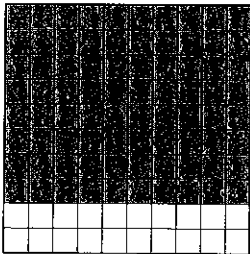


Practice Test I

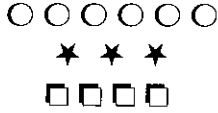
Fill in your answers on the answer sheet provided on page 207. Some questions may need to be answered on notebook paper.

- Austin had 7.44 inches of tape that will be divided into 3 pieces. What is the length of each piece?

a. 1.26 in.
b. 2.48 in.
c. 22.32 in.
d. 24.8 in.
- 

2.
- "y to the 4th power" is what mathematical expression?

a. $4 \times y$
b. y^4
c. $4y$
d. $4 \cdot y$
- What ratio of the figures are stars?



a. $\frac{13}{3}$
b. $\frac{13}{4}$
c. $\frac{13}{6}$
d. $\frac{3}{3}$
- What is the price per pound?
8 pounds nails - \$23.60

a. \$2.07
b. \$2.59
c. \$2.95
d. \$188.80
- A large blue blanket measures 12 ft by 8 ft. A small grey blanket measures 5 ft by 3 ft. What is the difference in the areas of the two blankets?

a. 81 ft²
b. 111 ft²
c. 96 ft²
d. 15 ft²
- What is the price per pound?
8 pounds nails - \$23.60

a. \$2.07
b. \$2.59
c. \$2.95
d. \$188.80
- The difference of x and 7 is equal to 14. What is the equation that means the same as this expression?

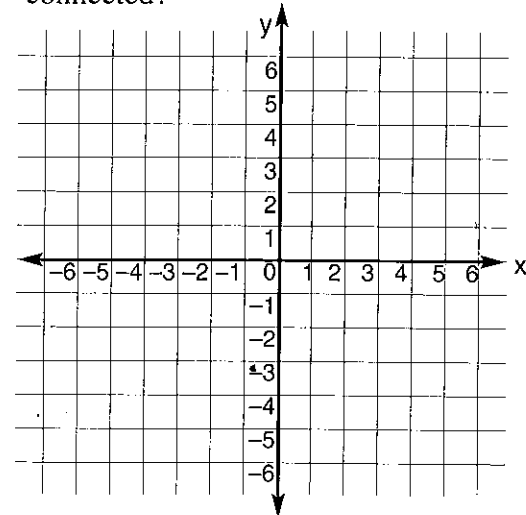
a. $\frac{7}{x} = 14$
b. $7x = 14$
c. $x + 7 = 14$
d. $x - 7 = 14$
- What is the value of $7x - 2$ if $x = 3$?

a. 23
b. 19
c. 8
d. 7
- Evaluate $25 + w + 2b$ if $w = 5$ and $b = 6$.

a. 38
b. 360
c. 42
d. 41

11. Simplify $8x + 2y + 3x$.
 a. $13xy$
 b. $5x + 2y$
 c. $11x + 2y$
 d. 13
12. What is the area of a rectangle with a length of 12 yd and a width of 5 yd?
 a. 17 yd^2
 b. 60 yd^2
 c. 34 yd^2
 d. 30 yd^2
13. Find the volume of a cereal box with a length of 18 in., a width of 7 in., and a height of 2 in.
 a. 27 in.^3
 b. 126 in.^3
 c. 43 in.^3
 d. 252 in.^3
14. Mack did $\frac{1}{4}$ of his chores in the morning. If he worked 2 hours in the morning, how many hours of chores does he still have left to do?
 a. 8 hr
 b. 2 hr
 c. 6 hr
 d. 1 hr
15. Girls are 30% of the enrollment in Mrs. Joy's class. There are 30 students in the class. How many girls are in the class?
 a. 15
 b. 6
 c. 10
 d. 9
16. 5% of $\$2,100 =$ _____.
 a. $\$105.00$
 b. $\$10.50$
 c. $\$1.50$
 d. $\$1,050.00$

17. When finding the mean of six numbers, you should _____.
 a. subtract the highest and lowest numbers
 b. add all six numbers and divide by six
 c. add all six numbers
 d. multiply the highest and lowest numbers and divide by 6
18. Kelly spent 6 hours driving 300 miles. Which of the following can be determined from the above information?
 a. the price of gasoline per mile
 b. the number of rest stops made
 c. the average rate of speed
 d. how many people were traveling with him
19. Janet and Mary sold 32 magazine subscriptions. Mary sold 3 times as many subscriptions as Janet. What equation could be used to find how many subscriptions Janet and Mary sold each?
 a. $\frac{x}{3} = 32$
 b. $3x = 32$
 c. $3x + x = 32$
 d. $x - 3 = 32$
20. The points (1, 1), (1, 3), (6, 1) and (6, 3) are plotted on graph paper. What is the shape of the object when the points are connected?



- a. circle
 b. square
 c. triangle
 d. rectangle

21. Carolyn can read 150 words in 3 minutes. How many words can she read in 9 minutes?
 a. 1350
 b. 450
 c. 16.7
 d. 27
22. A recipe calls for $3 \frac{1}{2}$ cups of flour. The recipe serves 15 people. How many cups of flour would be needed to serve 5 people?
 a. 7 cups
 b. $17 \frac{1}{2}$ cups
 c. $1 \frac{1}{2}$ cups
 d. $3 \frac{1}{2}$ cups
23. The following temperatures were the highs during the second week in July. $90^\circ, 95^\circ, 94^\circ, 91^\circ, 90^\circ, 88^\circ, 89^\circ$. What is the median temperature?
 a. $91 \frac{1}{2}^\circ$
 b. 89°
 c. 91°
 d. 90°
24. Express 216 in exponential form.
 a. 4^3
 b. 6^3
 c. 8^3
 d. 5^3
25. There are 10 desks in a row. How many rows will be needed for 49 students?
 a. $\frac{10}{49}$ rows
 b. 4.9 rows
 c. 39 rows
 d. 490 rows

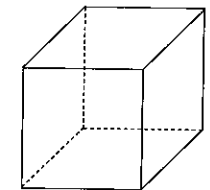
26. What means the same as 8^4 ?
 a. 8×4
 b. $8 \times 8 \times 8 \times 8$
 c. $4 \times 4 \times 4 \times 4 \times 4 \times 4 \times 4 \times 4$
 d. $8 + 4$

27. Which temperature is the highest?

Monday	-3°
Tuesday	-7°
Wednesday	-10°
Thursday	-1°
Friday	-2°

- a. -1°
 b. -10°
 c. -7°
 d. -2°

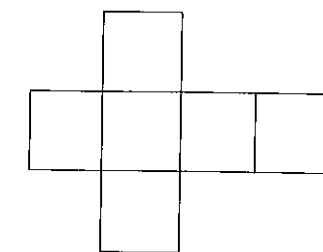
28. How many faces does this figure have?



- a. 4
 b. 8
 c. 6
 d. 7

29. Which would represent a 13 point decrease?
 a. -13
 b. -3
 c. +13
 d. +3

30. What solid figure would you make if you folded this net?

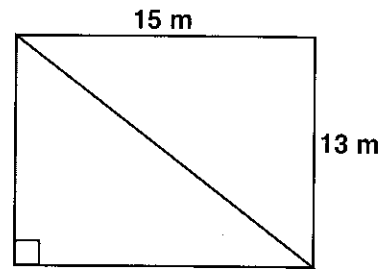


- a. triangle
 b. rectangle
 c. cube
 d. pyramid

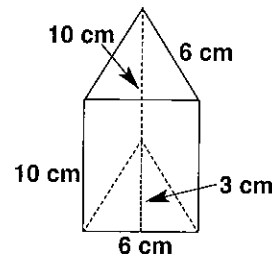
31. 19 is what percent of 76?
 a. 25%
 b. 2.5%
 c. 0.25%
 d. 250%
32. A plastic block has a length of 6 cm, a width of 3 cm, and a height of 4 cm. If the height is doubled, how does this volume compare to the original volume?
 a. Volume doubles.
 b. Volume increases by 4 cm.
 c. Volume decreases by $\frac{1}{2}$ cm.
 d. Volume does not change.
33. In solving $8 - (3 + 7) + 2$, what is done first?
 a. Add 2.
 b. Subtract 10.
 c. Add $3 + 7$
 d. Add $10 + 2$.
34. In a crate of 1,000 apples, 1 out of 50 apples is rotten. How many rotten apples are in the crate?
 a. 100
 b. 500
 c. 20
 d. $\frac{1}{1,000}$
35. What is the value of x in $3.6x = 32.04$?
 a. 115.344
 b. 35.64
 c. 8.9
 d. 0.112
36. There are 500 runners in a road race for charity. The runners must raise \$20,000. What amount must each runner raise to meet their goal?
 a. \$40
 b. \$400
 c. \$4
 d. \$25

37. The gym had a width of 20 ft. If the length is 90 ft, what is the area?
 a. 1,800 ft²
 b. 1,890 ft²
 c. 1,710 ft²
 d. 162,000 ft²

38. What is the area of the shaded triangle?



- a. 97.5 m²
 b. 183.5 m²
 c. 190 m²
 d. 195 m²
39. Timothy works 41.5 hours per week. If his weekly earnings are \$352.75, what is his hourly wage?
 a. \$6.50
 b. \$7.25
 c. \$7.35
 d. \$8.50
40. Find the surface area.



- a. 33 cm²
 b. 180 cm²
 c. 198 cm²
 d. 63 cm²

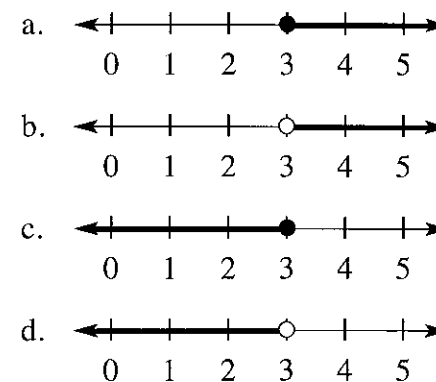
41. Eliana drives 30 miles in 40 minutes. How many miles can she drive in 60 minutes?
 a. 1,800 miles
 b. 45 miles
 c. 70 miles
 d. 90 miles

42. What is the mode of these exam grades?
 68, 100, 93, 68, 95, 93, 100, 92, 91
 a. 68 and 93
 b. 68
 c. 100
 d. 100, 68, and 93

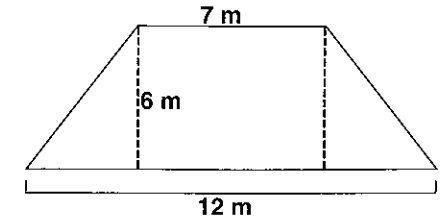
43. Which expression is equivalent to the following expression?
 $2y + 3(2 + y) + 4$
 a. $2y + 15$
 b. $5y + 10$
 c. $6y + 7$
 d. $6y + 13$

44. Madison received 0.54 of all votes cast in the election for Junior Women's Club president. If she received 405 votes, how many women voted?
 a. 218
 b. 750
 c. 815
 d. 850

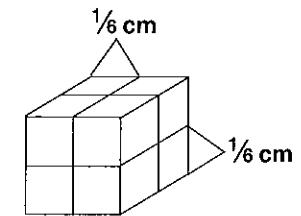
45. Which of the following graphs represents $s \geq 3$?



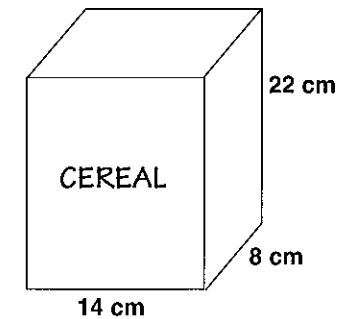
46. What is the area of this figure?



- a. 57 m²
 b. 64 m²
 c. 72 m²
 d. 504 m²
47. Find the volume of this cube.

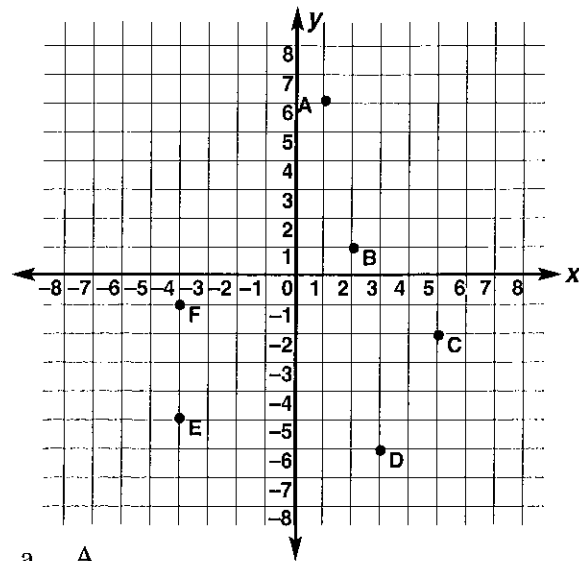


- a. $\frac{1}{36}$ cm³
 b. $\frac{1}{6}$ cm³
 c. $\frac{1}{27}$ cm³
 d. $\frac{1}{216}$ cm³
48. What is the surface area of this box of cereal?



- a. 596 cm²
 b. 804 cm²
 c. 1,192 cm²
 d. 2,464 cm²

49. What point on this grid is 4 units away from the ordered pair $(-4, -5)$?



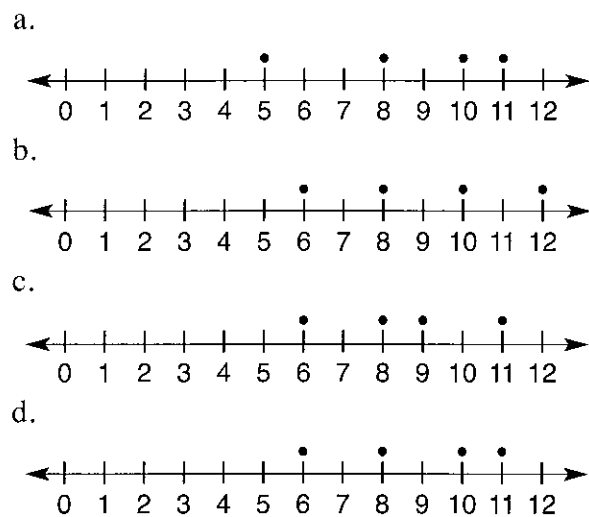
- a. A
b. B
c. D
d. F
50. What is the mode of these scores?
80, 93, 75, 81, 93, 57, 80, 98, 82, 93
- a. 75
b. 80
c. 93
d. 98
51. Find the range of these board lengths.
85, 91, 78, 83, 86, 94, 79
- a. 16
b. 78
c. 83
d. 91

52. What is the interquartile range of this data set?
27, 37, 21, 54, 47, 35
- a. 10
b. 16
c. 20
d. 47

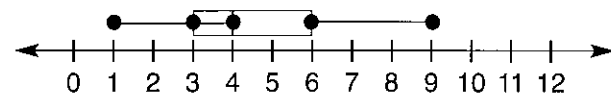
53. What is the third quartile of this data set?
40, 33, 68, 35, 50, 40, 46, 41, 43, 44
- a. 40
b. 42
c. 46
d. 47

54. Jason made the following free throws while playing five games of basketball. Find the mean deviation of his free throws.
5, 6, 3, 9, 7
- a. 1.4
b. 1.6
c. 2.1
d. 2.3

55. The animal shelter has four puppies. The puppies are 6 weeks, 8 weeks, 10 weeks, and 11 weeks old. Which of the number lines represents the ages of the four puppies?



56. What is the median of this box plot?



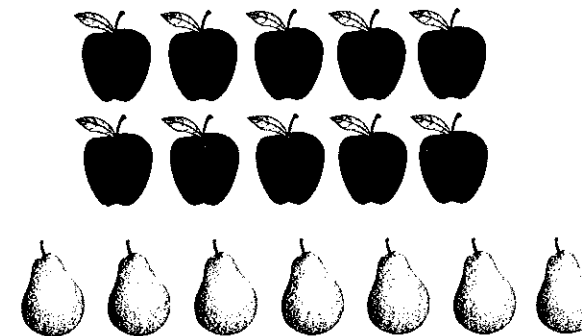
- a. 1
b. 3
c. 4
d. 9

57. Charlene has spent 60 minutes on her science research. If she is 30% done, how many minutes will she spend on her research total?
- a. 180
b. 200
c. 220
d. 250

58. How many pints are in 8 gallons?
- a. 32 pt
b. 48 pt
c. 56 pt
d. 64 pt

59. Joan bought 4 liters of cola. How many milliliters did she buy?
- a. 40 mL
b. 400 mL
c. 4,000 mL
d. 40,000 mL

60. What is the ratio of apples to pears?



- a. 10:7
b. 10:17
c. 7:10
d. 7:17

61. Solve the inequality:

- $\frac{1}{8}z > 16.$
- a. $z > 2$
b. $z > \frac{1}{2}$
c. $z > 64$
d. $z > 128$

62. What mathematical term can be used to describe the underlined part of the following expression?

$$\underline{2a^2} + a - 7$$

- a. coefficient
b. operation
c. term
d. variable

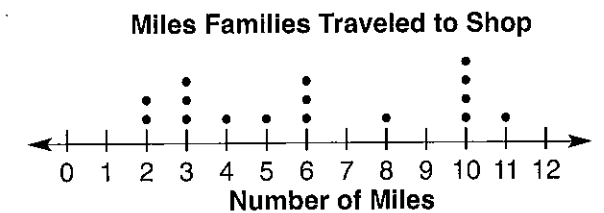
63. What is the value of the following expression? $5(4 - 2) \div 2 + 3$

- a. 2
b. 5
c. 6
d. 8

64. What is the distance between Points S $(-2, 7)$ and T $(-2, 3)$?

- a. 0
b. 4
c. 10
d. 12

65. How many families traveled 10 miles last week to shop?



- a. 1
b. 2
c. 3
d. 4