Choose the correct answer.

- 1. The prices for 7 different totes are \$52, \$22, \$50, \$44, \$60, \$48, and \$52. What is the outlier in the data set?
 - A \$22
 - в \$44
 - **c** \$52
 - **D** \$60
- 2. It takes Harrison $1\frac{1}{2}$ hours to finish his history project. It takes Miles $3\frac{2}{3}$ hours to finish his science project. How many times as long does it take Miles to finish his science project than it takes Harrison to finish his history project?
 - **A** $2\frac{1}{6}$
 - в 24
 - **c** $2\frac{3}{6}$
 - **D** $5\frac{1}{6}$

- **3.** A square pyramid has a base with a side length of 3 feet and lateral faces with heights of 6 feet. What is the lateral area of the pyramid?
 - A 9 square feet
 - **B** 27 square feet
 - c 36 square feet
 - **D** 45 square feet
- **4.** Grant buys a pair of shoes for \$68. He has a coupon for 15% off. Which shows 15% written as a decimal?
 - **A** 0.015
 - **B** 0.15
 - **c** 1.5
 - **D** 15.0
- **5.** A tabletop is in the shape of a trapezoid. The area is 420 square inches. The bases are 22 inches and 38 inches. What is the height?
 - A 7 inches
- c 30 inches
- **B** 14 inches
- **D** 60 inches

- 6. Robin read 63 books last year. She read 9 more books than Trisha. The equation b + 9 = 63 gives the number of books b that Trisha read last year. Which is the solution of the equation?
 - **A** b = 7
 - **B** b = 54
 - **c** b = 70
 - **D** b = 72
- **7.** A hardware store received 2.5 tons of lumber. What is the weight in pounds?
 - **A** 50,000 pounds
 - **B** 25,000 pounds
 - **c** 5,000 pounds
 - **D** 2,500 pounds
- 8. Mr. Gaines ordered 1,320 pencils for the beginning of the school year. He is going to divide the pencils into 5 groups to give to each grade level. How many pencils will each grade level receive?
 - **A** 264
 - **B** 330
 - **c** 440
 - **D** 6,600

- **9.** Dexter earns \$12.50 each hour he helps his dad with landscaping. He helped his dad for 4.5 hours last weekend. How much did Dexter make helping his dad last weekend?
 - **A** \$13.00
 - **B** \$56.25
 - **c** \$62.50
 - **D** \$562.50
- **10.** Summer has 5 albums of photos. There are 23, 16, 18, 21, and 32 photos in each album. If she rearranges the photos so each album has the same number of photos, how many photos will be in each album?
 - **A** 5
 - **B** 12
 - **C** 16
 - **D** 22

11. There are 26 songs in a playlist. Jackson adds some more songs to the playlist. Which equation models how many songs *a* are in the playlist after Jackson adds *s* more songs to the playlist?

A
$$a = 26 - s$$

B
$$s = 26 \times a$$

c
$$a = 26 + s$$

D
$$s = 26 \div a$$

12. A bowl of soup costs \$3.00, half of a sandwich costs \$2.75, and drinks cost \$1.50. There is also a delivery fee of \$5. The expression 3n + 2.75n + 1.50n + 5 gives the total cost, in dollars, for buying a bowl of soup, half of a sandwich, and a drink for n people. Which is another way to write this expression?

B
$$7.25n + 5$$

c
$$7.25n^3 + 5$$

D
$$n + 12.25$$

park, the roller coaster is located at (-5, 6). The Ferris wheel is located 3 units south of the roller coaster. What ordered pair represents the location of the Ferris wheel?

$$B(-5, 3)$$

$$\mathbf{C}$$
 (-5, 9)

$$D (-8, 6)$$

14. The maximum height to play in the bounce house is 52 inches. Which inequality represents the possible heights *h* a person can be to play in the bounce house?

A
$$h < 52$$
 inches

B
$$h > 52$$
 inches

c
$$h \le 52$$
 inches

D
$$h \ge 52$$
 inches

15. Chrissy poured 35 ounces of milk into $4\frac{1}{2}$ -ounce servings. She has $3\frac{1}{2}$ ounces of milk left over. How many $4\frac{1}{2}$ -ounce servings did Chrissy pour?

- **16.** Tom has 4 yards of lumber. What is the length of the lumber in inches?
 - A 12 inches
 - **B** 48 inches
 - c 144 inches
 - **D** 180 inches
- **17.** Katherine bought a total of $\frac{14}{16}$ pound of blue beads and silver beads at the store. The weight of the blue beads is $\frac{6}{8}$ of the total weight. What is the weight of the blue beads?
 - $\mathbf{A} \frac{7}{32}$ pound
 - $\mathbf{B} \frac{1}{2}$ pound
 - **c** $\frac{21}{32}$ pound
 - **D** $\frac{12}{16}$ pound

- **18.** Movie tickets cost \$8 each. Camille graphs the relationship that gives the cost *y* in dollars of buying *x* movie tickets. Which ordered pair is a point on the graph of the relationship?
 - **A** (2, 10)
 - **B** (2, 16)
 - **c** (8, 1)
 - **D** (8, 8)
- **19.** The linear equation y = 6x represents the cost y in dollars of x pounds of chicken wings. Which ordered pair lies on the graph of the equation?
 - **A** (3, 18)
- **c** (6, 6)
- **B** (6, 3)
- **D** (2, 24)
- **20.** Ella left out one prime factor when she wrote her prime factorization for 160.

$$2 \times 2 \times 2 \times 2 \times 2 \times \square$$

What is the unknown prime factor?

- **A** 3
- **B** 5
- **c** 8
- **D** 16

- **21.** There are 3 red pens and 12 black pens in a package. Which ratio is equivalent to $\frac{3}{12}$?
 - **A** $\frac{12}{3}$
 - **B** $\frac{15}{48}$
 - **c** $\frac{1}{4}$
 - **D** $\frac{6}{36}$
- **22.** Lindsey made a quilt for her daughter. The rectangular quilt is 36 inches long and 25 inches wide. What is the area of the quilt?
 - A 61 square inches
 - **B** 122 square inches
 - c 875 square inches
 - **D** 900 square inches

- **23.** Candace has a tablecloth that has an area of 22.5 square feet. If the length of the tablecloth is 1.5 yards, what is the width in feet?
 - A 21 feet
 - B 15 feet
 - **c** 5 feet
 - **D** 4 feet
- **24.** Eight chairs weigh 56 pounds. How much do 5 chairs weigh?
 - A 40 pounds
 - **B** 35 pounds
 - c 11 pounds
 - D 7 pounds
- **25.** A chef uses roasted peppers for his salsa. He uses 3³ peppers in each of 5 batches of salsa. How many peppers did the chef use in all 5 batches?
 - **A** 135
 - **B** 45
 - **c** 32
 - **D** 27

- **26.** Marco uses 3.5 liters of broth to make a large batch of soup. How many milliliters of broth does he use to make soup?
 - A 0.35 milliliter
 - **B** 35.0 milliliters
 - c 350 milliliters
 - **D** 3,500 milliliters
- **27.** Marci researches different prices of T-shirts at four stores.

Clothes Mania: 3 T-shirts for \$47.64 The Right Outfit: 5 T-shirts for \$62.50 Sassy Closet: 2 T-shirts for \$48.00 T-shirt World: 4 T-shirts for \$109.20

Which store charges the **least** amount per T-shirt?

- A Clothes Mania
- **B** The Right Outfit
- c Sassy Closet
- **D** T-shirt World

- **28.** There are 7² rows of seats in the auditorium. How many rows of seats are in the auditorium?
 - **A** 14
 - **B** 49
 - **c** 77
 - **D** 700
- **29.** The inequality c < 412 represents the occupancy limit of customers c in a restaurant. Which is a solution of the inequality?
 - **A** c = 511
- **c** c = 419
- **B** c = 499
- **D** c = 357
- **30.** The low temperature last week was -3°F. What is the absolute value of -3?
 - \mathbf{A} -3
 - **B** 0
 - **c** 3
 - **D** 6

- **31.** Stan withdrew \$44 from his bank account. What integer represents the change in Stan's account?
 - \mathbf{A} $^{-}56$
 - B 44
 - **C** 0
 - **D** 44

32. Carli records the number of articles she writes each month for a year.

Articles Each Month						
5	5	3	6	2	5	
5	4	4	7	9	2	

What percent of the months does she write **more** than 3 articles?

- A 90%
- в 75%
- **c** 20%
- **D** 3%

- 33. Steve cut a triangle with a height of 3 inches and a base of 6 inches out of a square piece of paper measuring 10 inches by 10 inches. He keeps the leftover paper for other projects. What is the area of the paper he will have left over?
 - A 9 square inches
 - **B** 11 square inches
 - **c** 91 square inches
 - **D** 100 square inches
- **34.** Which equation represents the relationship shown in the table?

Х	2	4	6	8
У	3	5	7	9

- **A** y = x 1
- **B** y = x + 1
- **c** y = x
- **D** $y = x \div 1$
- shaped like parallelograms. Each has a base of 22 inches and a height of 18 inches. What is the area of each mat?
 - A 396 square inches
 - **B** 198 square inches
 - c 80 square inches
 - **D** 40 square inches

- **36.** Tasha records the amount of beads she uses for each necklace she makes. The numbers of beads she uses are 35, 44, 15, 65, 28, 31, 15, 24, 19, and 24. What is the median of the data?
 - A 15
 - **B** 24
 - **c** 26
 - **D** 65
- **37.** Lilly plants 2 red rose bushes, 8 pink rose bushes, and 6 yellow rose bushes. What is the ratio of yellow rose bushes to pink rose bushes?
 - A 2:8
 - **B** 8:6
 - **c** 8:2
 - **D** 6:8

- **38.** John bought 7.5 liters of peanut oil. What is this amount as a mixed number?
 - **A** $7\frac{5}{100}$
 - **B** $7\frac{1}{5}$
 - **c** $7\frac{1}{2}$
 - **D** $7\frac{5}{7}$
- **39.** A cedar chest is a rectangular prism with a width of 24 inches and a height of 18 inches. The volume of the chest is 5,184 cubic inches. What is the length of the chest?
 - A 6 inches
 - B 12 inches
 - c 42 inches
 - **D** 216 inches
- **40.** Bailey has saved 54% of the money he needs to buy a new skateboard that costs \$172.00. How much more money does he need to buy the skateboard?
 - A \$79.12
 - **B** \$82.00
 - **c** \$92.88
 - **D** \$118.00

- **41.** The temperature in Seattle, Washington, was ⁻11.5°F one day last winter. Between which two integers does the temperature lie?
 - A 11 and 12
 - **B** 1 and 5
 - **c** -12 and -11
 - \mathbf{D} $^-11$ and $^-5$
- **42.** The graph shows the possible number of CDs *c* that can be checked out from the library at one time.



Which inequality represents this graph?

- **A** c > 8
- **B** c < 8
- **c** $c \le 8$
- D $c \ge 8$

43. The chart shows the number of meals purchased for lunch at nine different restaurants.

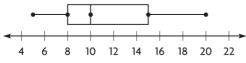
Number of Meals

6, 18, 25, 4, 10, 8, 6, 14, 15

What is the lower quartile of the data?

- **A** 6
- **C** 11
- **B** 10
- **D** 18
- **44.** A rectangular prism measures 6 inches by 6 inches by 10 inches. What is its surface area?
 - A 120 square inches
 - **B** 216 square inches
 - c 312 square inches
 - **D** 360 square inches
- **45.** Autumn cut out a triangular piece of fabric to sew on her comforter. The area of the triangle is 48 square inches, and the height is 12 inches. How long is the base of the triangle?
 - A 576 inches
 - **B** 60 inches
 - c 8 inches
 - 4 inches

- **46.** Mrs. Jackson instructed that 0.01 of a report should be memorized. What percent of the report should be memorized?
 - **A** 0.10%
 - **B** 1.0%
 - **c** 10%
 - **D** 100%
- **47.** The box plot displays data for the number of flavors of ice cream sold by several grocery stores.



Number of Ice Cream Flavors Sold

What is the interquartile range of the data?

- Δ 7
- **B** 8
- **C** 15
- **D** 16

- **48.** The expression 6*c* shows the number of tokens given to each guest who brings in *c* coupons. How many tokens would be given to a guest who brings 16 coupons?
 - **A** 6
 - **B** 22
 - **c** 90
 - **D** 96
- **49.** Joey sold his old surfboard for \$85. He saves 25% of the money to purchase a new surfboard. How much does Joey save for the new surfboard?
 - **A** \$2.15
 - **B** \$21.25
 - **c** \$25.00
 - **D** \$212.50
- **50.** The number of articles Ginger wrote for 5 months is 3, 2, 8, 3, and 4. The mean number of articles she wrote is 4. What is the mean absolute deviation of the data?
 - **A** 1.6
 - **B** 5
 - **c** 6.5
 - **D** 20

