Choose the correct answer.

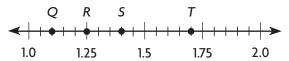
- **1.** At Fairview Elementary School, 9% of the students are left-handed. What is 9% written as a decimal?
 - **A** 90.0
 - **B** 9.0
 - **(C)** 0.9
 - **(D)** 0.09
- **2.** In the voting for mayor, Candidate Russell received 0.8 of the votes. What is 0.8 written as a percent?
 - **A** 800%
 - (B) 80%
 - **(C)** 8%
 - **(D)** 0.8%

- **3.** In the word MISSISSIPPI, what is the ratio of letter P's to letter I's?
 - (A) 2 to 4
 - **B** 4 to 2
 - **(C)** 4 to 11
 - (D) 2 to 11
- **4.** The picture shows a collection of eight baseballs and two footballs. What is the ratio of footballs to the total number of baseballs and footballs?



- (A) 2 to 8
- **B** 8 to 2
- **(C)** 2 to 10
- **D** 8 to 10

5. Toby ran a 10-kilometer race in $1\frac{2}{5}$ hours. Which point on the number line represents his time?



- A point Q
- B point R
- © point S
- **D** point T
- **6.** The lengths of four snakes are given.

Snake	1	2	3	4
Length (meters)	0.4	<u>1</u> 5	<u>1</u>	0.08

How long is the longest snake?

- A 0.4 meter
- $\bigcirc B = \frac{1}{5}$ meter
- \bigcirc $\frac{1}{6}$ meter
- **D** 0.08 meter

- **7.** At tryouts for the track team, Blake ran 40 yards in 5 seconds. What was his average speed?
 - \bigcirc A $\frac{1}{8}$ yard per second
 - B 8 yards per second
 - C 45 yards per second
 - D 200 yards per second

- **8.** On a business trip, Corinne drove 200 miles at an average speed of 50 miles per hour. How long did the trip take?
 - (A) 0.25 hour
 - (B) 4 hours
 - C 50 hours
 - **D** 150 hours

- 9. Members of the Canoe Club paddled at an average rate of 8 kilometers per hour for 4 hours. How far did they travel?
 - A 0.5 kilometer
 - (B) 2 kilometers
 - (C) 12 kilometers
 - D 32 kilometers
- **10.** The ratio of girls to boys in the school orchestra is 15 to 10. Which ratio is equivalent to 15 to 10?
 - (A) 10 to 5
 - (B) 10 to 15
 - (C) 12 to 8
 - (D) 32 to 24

- 11. Four of every 9 boxes of Crispy Critters cereal contain a prize. There are 54 boxes of Crispy Critters on the shelf at the grocery store. How many of the boxes would you expect to contain a prize?
 - **A** 6
 - (B) 24
 - **C** 27
 - **D** 45
- **12.** Jorge got a hit $\frac{8}{25}$ of the times that he batted. What percent of the times did he get a hit?
 - **A**) 8%
 - (B) 16%
 - **C**) 32%
 - **D** 64%

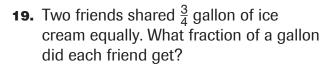
Write the correct answer.

- 13. In a survey, 80 percent of those surveyed had at least one brother or sister. What fraction of those surveyed had at least one brother or sister? Write your answer in simplest form.
- 15. It took Francisco 60 minutes to walk from his house to his grandmother's house. What is 60 written as a product of factors greater than 1? Each factor can have only 1 and itself as factors.

- **14.** In a survey, $\frac{7}{20}$ of the students in fifth grade said their family buys organic vegetables. What decimal represents the portion of students whose families buy organic vegetables?
- **16.** There are 225 students in the fifth grade. What is 225 written as a product of factors greater than 1? Each factor can have only 1 and itself as factors.



17. Four pieces of rope measure 2.4 meters, $2\frac{1}{4}$ meters, 2.35 meters, and $2\frac{1}{3}$ meters in length. How long is the longest piece?



18. Four pitchers contain the amounts of milk given.

Pitcher	1	2	3	4
Amount of Milk (gallons)	<u>4</u> 5	$\frac{3}{4}$	0.85	0.7

If the amounts were located on a number line, which would be farthest to the left?

20. Four students spoke to the Parents Club for a total of $\frac{2}{3}$ hour. Each student spoke for the same amount of time. How long did each student speak?

- 21. Blythe shaded 4 columns and 3 single squares of a 100-square grid to represent the portion of days that it rained last year. What percent of the grid did she **not** shade?
- **23.** Petra typed a 4-page report in 48 minutes. What was Petra's unit rate of typing per page?

- **22.** Marcus shaded 47% of a 100-square grid to represent the portion of students in his school who are involved in afterschool activities. Did he shade *close to none, close to one-quarter, close to half,* or *close to all* of the squares?
- **24.** A company manufactured 250 plastic toys in 5 hours. What was the unit rate of manufacturing the toys per hour?

25. A sales clerk earns \$36 in 4 hours. What is the unit rate for working as a sales clerk per hour?



Choose the correct answer.

- **1.** The inequality $h \ge 54$ represents the height requirement, in inches, for people who wish to ride the Whirlybird at Grover Beach Park. Which height h does **not** satisfy the requirement?
 - (A) 50
 - **B**) 54
 - **(C)** 62
 - **(D)** 74
- **2.** A sign in an elevator says "Maximum total weight 800 pounds." Which inequality represents all the possible weights *w* that are allowed on the elevator?
 - **(A)** w > 800
 - **B** $w \le 800$
 - **(C)** w ≥ 800
 - $(\mathbf{D}) \ w < 800$

- **3.** In the last three basketball games, Paula has scored 21, 25, and 15 points *p*. Which inequality does **not** describe the numbers of points she has scored?
 - **(A)** p > 21
 - **B** $p \le 25$
 - (C) p < 30
 - **(D)** $p \ge 10$
- **4.** The number of cans that each student in Mrs. Silva's class collected for the canned food drive is shown.

Number of Cans Collected

18, 27, 12, 22, 13, 29, 17, 22, 24, 14, 28, 17

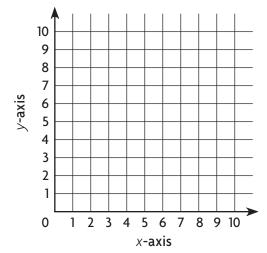
Which of the following are reasonable intervals for a histogram of the data?

- **A** 6-10, 11-15, 16-20, 21-25
- **(B)** 11–15, 16–20, 21–25, 26–30
- **(C)** 16-20, 21-25, 26-30, 31-35
- **(D)** 6–10, 11–15, 16–20, 21–25, 26–30, 31–35

- **5.** The intervals in a histogram are 1–5, 6–10, 11–15, and 16–20. Which of the following could be the data in the histogram?
 - **A** 5, 6, 6, 6, 9, 9, 14, 21, 24, 25
 - **(B)** 0, 2, 2, 5, 7, 9, 15, 15, 16, 17
 - **(C)** 2, 4, 5, 6, 6, 11, 13, 13, 16, 17
 - **(D)** 3, 7, 8, 9, 9, 13, 14, 15, 19, 26

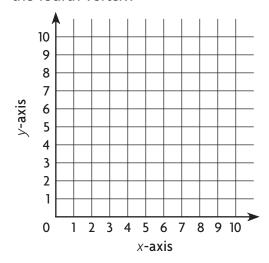
- **6.** Which situation is **best** represented by the integer ⁻45?
 - A earnings of \$45 at a job
 - (B) spending \$45 on clothes
 - C gaining 45 points in a game
 - (D) an elevation of 45 feet above sea level

- **7.** If the integer +50 represents an elevation of 50 feet above sea level, what does 0 represent?
 - A an elevation of 100 feet above sea level
 - (B) an elevation of 50 feet below sea level
 - (C) sea level
 - (D) an elevation of 25 feet below sea level
- **8.** On a coordinate grid, the vertices of Marie's garden are at (0, 8), (5, 2), (0, 2), and (5, 8). What is the shape of the patio?



- (A) rectangle
- B trapezoid
- **C**) square
- (D) rhombus

9. A parallelogram is drawn on a coordinate grid. Three of the coordinates are (3, 6), (5, 3), and (7, 5). Which could **not** be the coordinates of the fourth vertex?



- **(A)** (1, 4)
- **B** (6, 1)
- **C** (5, 8)
- **D** (9, 2)
- **10.** A traffic sign is drawn on a coordinate grid. The vertices of the sign are (2, 2), (5, 8), (0, 5), (5, 2), (2, 8), and (7, 5). What is the shape of the sign?
 - A rectangle
 - **B** pentagon
 - **C** hexagon
 - (D) octagon

11. The prices of 8 sweaters, in dollars, are given.

Sweater Prices (dollars) 30, 41, 36, 31, 28, 43, 28, 35

What is the median of the data?

- (A) \$28
- **B** \$33
- **(C)** \$34
- **D** \$35

12. The number of bird species seen by seven birdwatchers is given.

Number of Bird Species 29, 27, 36, 40, 36, 27, 35

What is the mode of the data?

- A 27 and 36
- **B** 27
- **(C)** 36
- (D) no mode

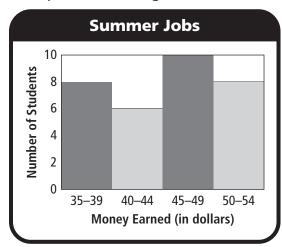
Write the correct answer.

- **13.** Greg wants to find the median of a set of 9 data items. First, he ordered the items from least to greatest. What should he do next?
- **15.** The expression $w \times 7$ gives the number of days in w weeks. What is the value of the expression when w = 14?

- 14. The basketball team practiced for h hours. The baseball team practiced for 3 more hours than the basketball team. Write an expression that represents the number of hours that the baseball team practiced.
- **16.** There are 3 feet *f* in a yard. Write an expression that represents the number of yards that are equivalent to *f* feet.



For 17-19, use the histogram.

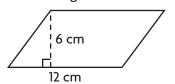


17. Which interval has the **greatest** frequency?

18. How many students earned **more than** \$44?

19. How many students earned between \$40 and \$44?

Page 520. Ursula designed this parallelogram for a T-shirt logo.



What is the area of the logo?

21. A box contains 12 tiles. Each tile is shaped like a parallelogram. Each tile has a base of 9 inches and a height of 5 inches. What is the total area of all the tiles?



22. Two parallelogram-shaped pennants have the same area. One has a base of 15 inches and a height of 12 inches. The other has a base of 18 inches. What is its height?

The table gives the number of points
Mark scored in his team's first 10
basketball games.

Nun	nber of	Points	Score	d	
Games 1–5	8	8	11	7	6
Games 6-10	8	12	11	10	14

How did Mark's average in Games 6–10 compare with his average in Games 1–5?

23. Val's test scores are shown.

	Val's Test Scores	
89, 93	3, 91, 93, 98, 79, 90, 95, 82	

What was her average score?

25. The costs of 6 printers, in dollars, are given. What is the average price?

Cost of Printers (dollars)
163 159 156 176 159 195