

**SECTION 1**  
25 Questions

Following each problem in this section, there are five suggested answers. Work each problem in your head or in the blank space provided at the right of the page. Then look at the five suggested answers and decide which one is best.

Note: Figures that accompany problems in this section are drawn as accurately as possible EXCEPT when it is stated in a specific problem that its figure is not drawn to scale.

Sample problem:

$\begin{array}{r} 5,413 \\ - 4,827 \\ \hline \end{array}$	<p>(A) 586 (B) 596 (C) 696 (D) 1,586 (E) 1,686</p>	<input checked="" type="radio"/> <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E
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- 
1. If  $30 + m = 30$ , then  $30 \times m =$

**USE THIS SPACE FOR FIGURING.**

- (A) 31  
(B) 30  
(C) 29  
(D) 1  
(E) 0

- 
2. Katrina is buying one bracelet for each of her eleven friends. The bracelets are sold in packs of three. How many packs of bracelets will Katrina need to buy?

- (A) 3  
(B) 4  
(C) 5  
(D) 9  
(E) 11

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**USE THIS SPACE FOR FIGURING.**

3. Elena has a roll of ribbon that is  $6\frac{1}{3}$  feet long. If she wants to cut the roll of ribbon into 5-inch pieces, how many pieces can she make?
- (A) 14
  - (B) 15
  - (C) 16
  - (D) 20
  - (E) 34
- 

4. If Christophe ran 3 miles in half an hour, his average speed was
- (A) 1.5 miles per hour
  - (B) 3 miles per hour
  - (C) 4.5 miles per hour
  - (D) 6 miles per hour
  - (E) 12 miles per hour
- 

5. Which of the following statements is correct, according to the graph in Figure 1?
- (A) The number of cones sold in the winter is equal to the number of cones sold in the fall.
  - (B) The number of cones sold in the winter was less than half the number of cones sold in the spring.
  - (C) The number of cones sold in the summer was twice the number of cones sold in the fall.
  - (D) The number of cones sold in the fall was twice the number of cones sold in the winter.
  - (E) More cones were sold in the summer than in the spring and fall combined.

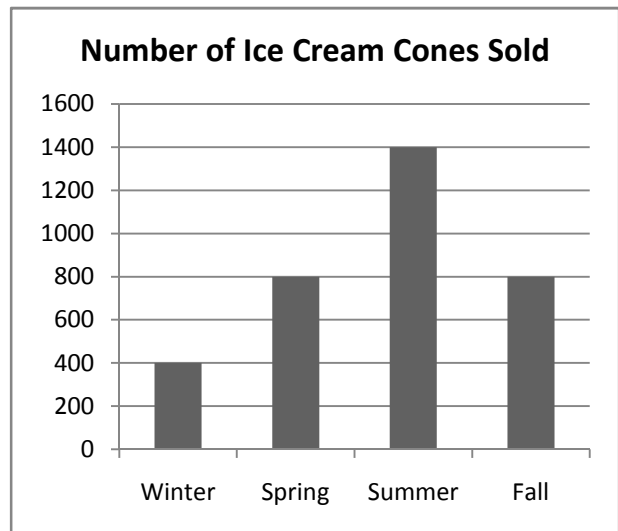


Figure 1

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USE THIS SPACE FOR FIGURING.

6. What is the value of the "7" in 625.713?

- (A) 7 ones
  - (B) 7 tenths
  - (C) 7 hundredths
  - (D) 7 tens
  - (E) 7 thousandths
- 

7. A long distance phone call costs \$10.00 for the first ten minutes and \$0.75 for each additional thirty seconds.

If Andre has \$16.65, he can talk for

- (A) 13 minutes and 30 seconds
  - (B) 14 minutes
  - (C) 14 minutes and 30 seconds
  - (D) 15 minutes
  - (E) 17 minutes and 30 seconds
- 

8.  $0.025 \times 40.00 =$

- (A) 0.01
  - (B) 0.1
  - (C) 1
  - (D) 10
  - (E) 100
- 

9.  $3\frac{1}{3} + 6\frac{2}{3} + 1\frac{1}{3}$  is approximately equal to

- (A) 9.33
- (B) 10.33
- (C) 10.67
- (D) 11.33
- (E) 11.67

GO ON TO THE NEXT PAGE.

USE THIS SPACE FOR FIGURING.

10. 26 is 40 percent of

- (A) 0.65
  - (B) 10.4
  - (C) 60
  - (D) 65
  - (E) 66
- 

11. For any numbers  $a$  and  $b$ ,  $a \spadesuit b = a - 3b$ . What is the value of  $2 \spadesuit 4$ ?

- (A) 10
  - (B) 4
  - (C) -4
  - (D) -5
  - (E) -10
- 

12. If one quarter of the price of a plane ticket is 125 dollars, the price of five plane tickets can be determined by multiplying 125 by

- (A)  $\frac{1}{5}$
  - (B) 4
  - (C) 5
  - (D) 10
  - (E) 20
- 

13. In Figure 2,  $E$  will be the midpoint of side  $AD$  and  $F$  will be the midpoint of side  $AB$ . Which point represents the midpoint of a line segment that would join  $E$  and  $F$ ?

- (A)  $G$
- (B)  $H$
- (C)  $J$
- (D)  $K$
- (E)  $L$

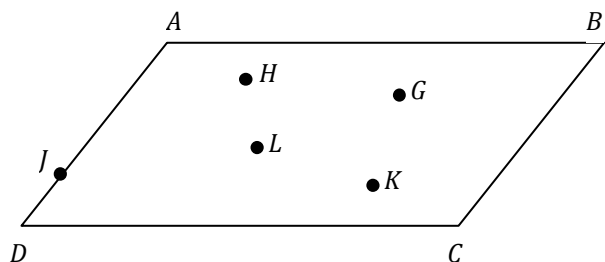


Figure 2

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USE THIS SPACE FOR FIGURING.

14. The average weight of three dogs is 55 pounds, and the average weight of five cats is 9 pounds. What is the average weight, in pounds, of all eight animals?
- (A) 8
  - (B) 12.5
  - (C) 21.75
  - (D) 26.25
  - (E) 46
- 

15. If  $0 < x < 3$ , which of the following expressions has the smallest value?
- (A)  $x - 3$
  - (B)  $x + 3$
  - (C)  $\frac{x}{3} + 1$
  - (D)  $x + \frac{3}{x}$
  - (E)  $3x + 3$
- 

16. In the quadrilateral in Figure 3,  $x =$
- (A) 285
  - (B) 125
  - (C) 105
  - (D) 85
  - (E) 75

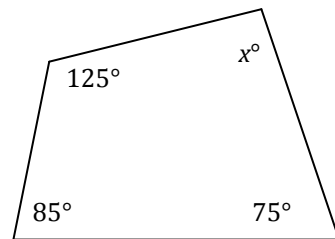


Figure 3

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17. Divya and two of her friends planned to spend \$120 each on gas for their road trip. Then, another friend decided to join them. If all friends re-divided the cost of gas equally among them, how much did each friend spend?
- (A) \$80
  - (B) \$90
  - (C) \$100
  - (D) \$110
  - (E) \$120

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USE THIS SPACE FOR FIGURING.

18. If the average of four consecutive odd numbers is 24, what is the largest number?

- (A) 23
  - (B) 25
  - (C) 27
  - (D) 29
  - (E) 96
- 

19. At a fundraiser, there are 27 volunteers that need to be divided into groups. If at least 5 but no more than 9 people can be in a group, and no two groups can have the same number of volunteers, what is the smallest number of groups required to accommodate all 27 volunteers?

- (A) 4
  - (B) 5
  - (C) 7
  - (D) 8
  - (E) 9
- 

20. At a bike store, the number of bicycles in stock is equal to the number of tricycles in stock. If the total number of bicycle and tricycle wheels is 55, how many tricycles are there?

- (A) 9
- (B) 10
- (C) 11
- (D) 22
- (E) 33

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USE THIS SPACE FOR FIGURING.

21. The slope of the line that is perpendicular to  $3x + y = 8$  is
- (A)  $\frac{1}{3}$
  - (B)  $-\frac{1}{3}$
  - (C)  $\frac{3}{8}$
  - (D)  $-3$
  - (E)  $3$
- 
22. Aram lives 5 miles from Brian's house. Simran lives 8.5 miles from Brian's house. How far is Aram's house from Simran's house?
- (A) 3.5 miles
  - (B) 5 miles
  - (C) 11 miles
  - (D) 13.5 miles
  - (E) It cannot be determined from the information given.
- 
23. A music store conducted a survey about whether people liked rock music, country music, or both. Out of the 800 respondents, 300 people liked country music and 700 people liked rock music. Based on this information, how many people liked both country and rock music?
- (A) 100
  - (B) 150
  - (C) 200
  - (D) 250
  - (E) 300

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USE THIS SPACE FOR FIGURING.

24. A cubic box has a side length of 2 feet. How many of these boxes could fit inside a larger cubic box whose base has a perimeter of 24 feet?
- (A) 12
  - (B) 24
  - (C) 27
  - (D) 36
  - (E) 48
- 

25. Marita has  $x$  dimes, 3 quarters, and  $y$  ten dollar bills. Which of the following expressions represents the total amount of money she has, in dollars?
- (A)  $x/10 + 0.75 + 10y$
  - (B)  $x + y + 3(0.25)$
  - (C)  $10/x + 75 + 10y$
  - (D)  $10/x + 0.75 + 10y$
  - (E)  $10x + 0.75 + 10y$

**STOP**

IF YOU FINISH BEFORE TIME IS CALLED,  
YOU MAY CHECK YOUR WORK ON THIS SECTION ONLY.  
DO NOT TURN TO ANY OTHER SECTION IN THE TEST.