

**A.9**

1. **During a sale, an automobile dealer sold 69 cars and trucks. If she sold 27 more cars than trucks, how many of each did she sell?**

- F 48 cars, 21 trucks
- G 45 cars, 24 trucks
- H 42 cars, 27 trucks
- J 35 cars, 34 trucks

2. 
$$\begin{cases} 2x + y = 4 \\ 3x - y = -14 \end{cases}$$

**Which is the solution to the system of equations shown?**

- F (-2, 8)
- G (-2, 0)
- H (2, 0)
- J (0, -2)

3. **What is the solution to this system of equations?**

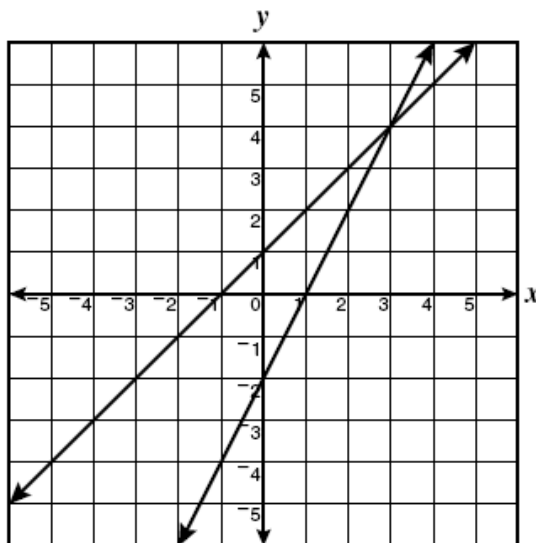
$$\begin{cases} 5x + 4y = 22 \\ 3x + 4y = 10 \end{cases}$$

- F  $x = 2, y = 2$
- G  $x = 2, y = 3$
- H  $x = 2, y = 1$
- J  $x = 6, y = -2$

4. **Kristy is making a rectangular quilt that is 2 feet longer than it is wide. If the perimeter of the quilt is to be 32 feet, what will be its dimensions?**

- A 4 ft by 8 ft
- B 5 ft by 7 ft
- C 7 ft by 9 ft
- D 15 ft by 17 ft

5.



**Which is most likely the solution to the system of equations shown in the graph?**

- F (4, 3)
- G (-2, 0)
- H (3, 4)
- J (1, 0)

6.

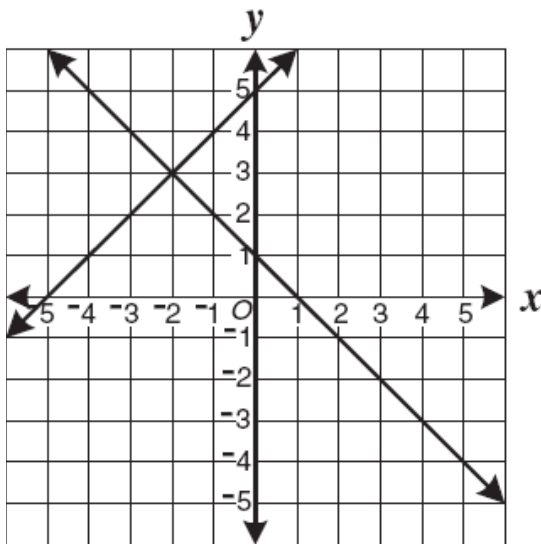
$$\begin{cases} x + y = 4 \\ x - y = 2 \end{cases}$$

Which is the solution to the system of equations shown?

- F  $x = 1, y = 3$
- G  $x = 2, y = 2$
- H  $x = 3, y = 1$
- J  $x = 4, y = 0$

7.

This is a graph of a system of equations.



Which is most likely the solution to the system of equations shown?

- F (0, 5)
- G (1, 0)
- H (3, -2)
- J (-2, 3)

8.

A rectangle has a perimeter of 68 inches. Its length is 2 inches less than 3 times its width. What are the length and width of the rectangle?

- A Length = 22 in., width = 12 in.
- B Length = 25 in., width = 9 in.
- C Length = 28 in., width = 10 in.
- D Length = 22 in., width = 8 in.

9.

$$\begin{cases} x - y = 5 \\ x + y = 7 \end{cases}$$

What is the solution to the system of equations shown above?

- A  $x = 6, y = 1$
- B  $x = 4, y = 3$
- C  $x = 1, y = 6$
- D  $x = -1, y = 7$

10.

The Arcadia Theater charges \$4 for adult tickets and \$3 for student tickets. Mr. Steele purchased 9 tickets (some student and some adult) for \$31. Which system of equations could be used to find  $a$ , the number of adult tickets, and  $s$ , the number of student tickets Mr. Steele purchased?

- F  $\begin{cases} a + s = 31 \\ 4a + 3s = 9 \end{cases}$
- G  $\begin{cases} 4a + 3s = 31 \\ a + s = 9 \end{cases}$
- H  $\begin{cases} 3a + 4s = 31 \\ a + s = 9 \end{cases}$
- J  $\begin{cases} 3a + 4s = 9 \\ a + s = 31 \end{cases}$

