Choose the correct answer.

1. 14 school festival tickets were sold to adults and children. A total of $38 was collected from these ticket sales. Adult tickets cost $4 each, and child tickets cost $1 each. The system of linear equations below represents x, the number of adult tickets sold, and y, the number of child tickets sold.

$$x + y = 14$$
$$4x + y = 38$$

How many tickets were sold?

A. 6 adult tickets and 8 child tickets

B. 8 adult tickets and 6 child tickets

C. 10 adult tickets and 4 child tickets

D. 12 adult tickets and 2 child tickets

2. Kaya and Tad started with the same number of baseball cards in their collections. Kaya collected 3 cards per week and now has 29 cards. Tad collected 2 cards per week and now has 20 cards. Let x represent the number of cards they began with, and let y represent the number of weeks. Which system of equations represents this situation?

A. $x + y = 20$
$3x + 2y = 29$

B. $5y = 49$
$x + 20 = 29$

C. $x + 3y = 20$
$x + 2y = 29$

D. $x + 3y = 29$
$x + 2y = 20$

3. The perimeter of an isosceles triangle is 16 inches. The length of its base is 2 times the length of one of its other sides. In the equations below, x represents the length of each of its equal sides, and y represents the length of its base.

$$2x + y = 16$$
$$y = 2x$$

What are the side lengths of the triangle?

A. 3 in., 3 in., 6 in.

B. 4 in., 4 in., 8 in.

C. 4 in., 8 in., 8 in.

D. 6 in., 6 in., 8 in.

4. Heidi paid $18 for 7 pairs of socks. She bought wool socks that cost $3 per pair and cotton socks that cost $2 per pair. How many pairs of socks did she buy?

A. 2 pairs of wool and 5 pairs of cotton

B. 3 pairs of wool and 4 pairs of cotton

C. 4 pairs of wool and 3 pairs of cotton

D. 5 pairs of wool and 2 pairs of cotton

5. A jar contains only dimes and nickels. The total number of coins in the jar is 15. The total value of the coins is $1.00. How many of each type of coin are in the jar?

A. 5 dimes and 10 nickels

B. 7 dimes and 8 nickels

C. 8 dimes and 7 nickels

D. 10 nickels and 5 dimes

6. Juan is trying to decide which parking garage to use. Bargain Garage charges a flat fee of \$2 plus \$4 per hour. Grey's Garage charges a flat fee of \$8 plus \$2 per hour. For how many hours will the cost of parking in either garage be the same, and what will that cost be?

A. For 2 hours, the cost at either garage will be \$10.

B. For 2 hours, the cost at either garage will be \$12.

C. For 3 hours, the cost at either garage will be \$14.

D. For 3 hours, the cost at either garage will be \$16.

7. James scored a total of 15 points during a basketball game. During the game, he made only free throws, worth 1 point each, and 3-point baskets. He made a total of 7 baskets. How many free throws and how many 3-point baskets did James make during the game?

A. 0 free throws and 7 three-point baskets

B. 1 free throw and 6 three-point baskets

C. 2 free throws and 5 three-point baskets

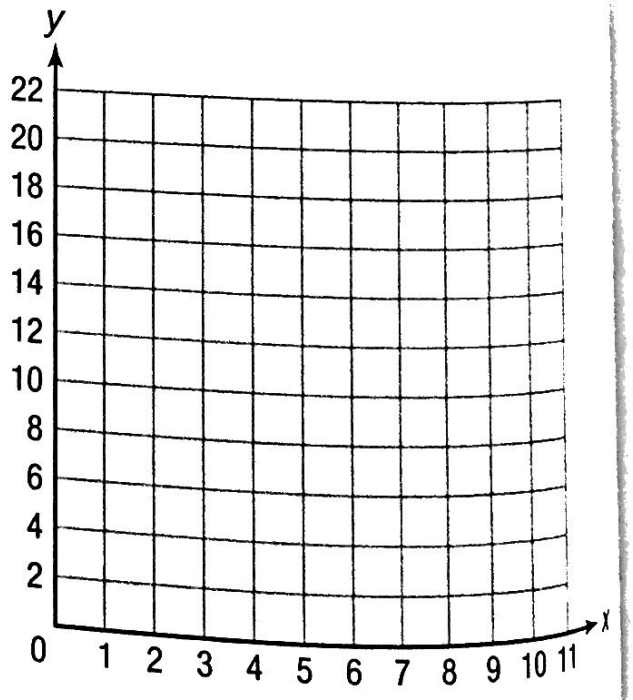
D. 3 free throws and 4 three-point baskets

8. Lucia wants to go ice skating. She must pay for admission and then rent ice skates. Rates for two rinks near her home are shown below.

Ice Plex
\$5 for admission plus \$2 per hour for skate rental

Skate World
\$10 for admission plus \$1 per hour for skate rental

A. Let x represent the cost of admission in dollars. Let y represent the number of hours during which a customer rents skates. Write a system of equations to represent this problem situation. Then graph the system on the coordinate grid.



B. For how many hours of skate rental will the total cost be the same at both skating rinks? What would that total cost be? Use the solution for the system of linear equations to explain your answer.