

1. $x + y = 75$

The equation above relates the number of minutes, x , Maria spends running each day and the number of minutes, y , she spends biking each day. In the equation, what does the number 75 represent?

- A) The number of minutes spent running each day
- B) The number of minutes spent biking each day
- C) The total number of minutes spent running and biking each day
- D) The number of minutes spent biking for each minute spent running

2. Which of the following is equivalent to $3(x + 5) - 6$?

- A) $3x - 3$
- B) $3x - 1$
- C) $3x + 9$
- D) $15x - 6$

3.
$$\begin{aligned} x &= y - 3 \\ \frac{x}{2} + 2y &= 6 \end{aligned}$$

Which ordered pair (x, y) satisfies the system of equations above?

- A) $(-3, 0)$
- B) $(0, 3)$
- C) $(6, -3)$
- D) $(36, -3)$

4. If $2x + 8 = 16$, what is the value of $x + 4$?

5. The graph of a line in the xy -plane passes through the point $(1, 4)$ and crosses the x -axis at the point $(2, 0)$. The line crosses the y -axis at the point $(0, b)$. What is the value of b ?

6. If $a - b = 12$ and $\frac{b}{2} = 10$, what is the value of $a + b$?

- A) 2
- B) 12
- C) 32
- D) 52

7.
$$\begin{aligned} g(x) &= 2x - 1 \\ h(x) &= 1 - g(x) \end{aligned}$$

The functions g and h are defined above. What is the value of $h(0)$?

- A) -2
- B) 0
- C) 1
- D) 2

8.
$$\begin{aligned} -3x + 4y &= 20 \\ 6x + 3y &= 15 \end{aligned}$$

If (x, y) is the solution to the system of equations above, what is the value of x ?