

# Making More New, True Equations

Let's practice combining like terms and working with horizontal and vertical lines.

## 14.1

## Criss Cross'll Make You Jump

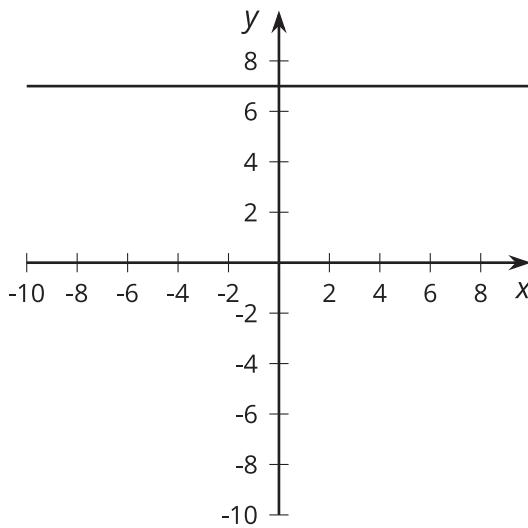
Match each equation with its graph. One graph does not match with any of the equations.

- $x = 7$

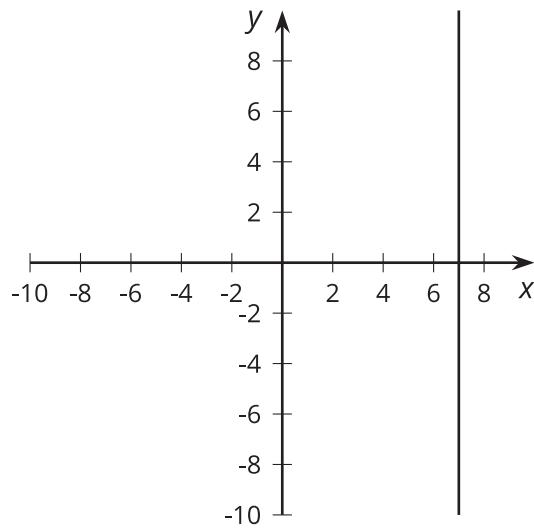
- $y = 7$

- $x + y = 7$

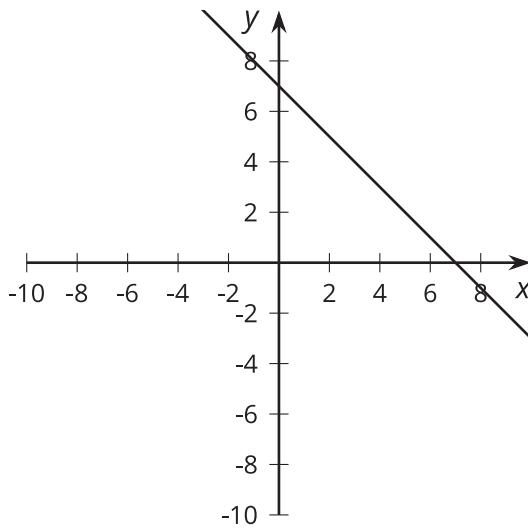
**A**



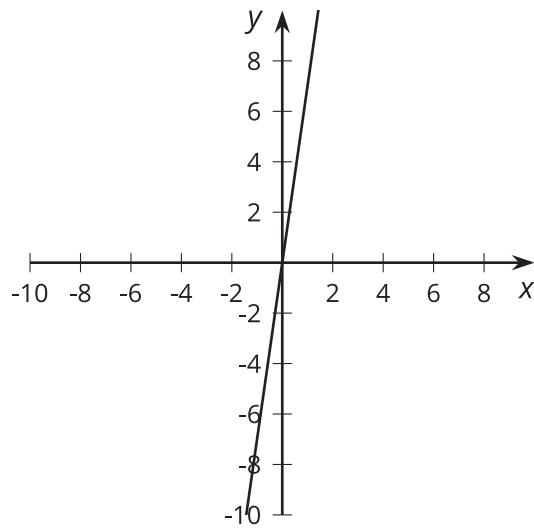
**B**



**C**



**D**



## 14.2 They're Like Terms, Man

Rewrite each expression by combining like terms.

1.  $11s - 2s$

2.  $5t + 3z - 2t$

3.  $23s - (13t + 7t)$

4.  $7t + 18r + (2r - 5t)$

5.  $-4x + 6r - (7x + 2r)$

6.  $3(c - 5) + 2c$

7.  $8x - 3y + (3y - 5x)$

8.  $5x + 4y - (5x + 7y)$

9.  $9x - 2y - 3(3x + y)$

10.  $6x + 12y + 2(3x - 6y)$



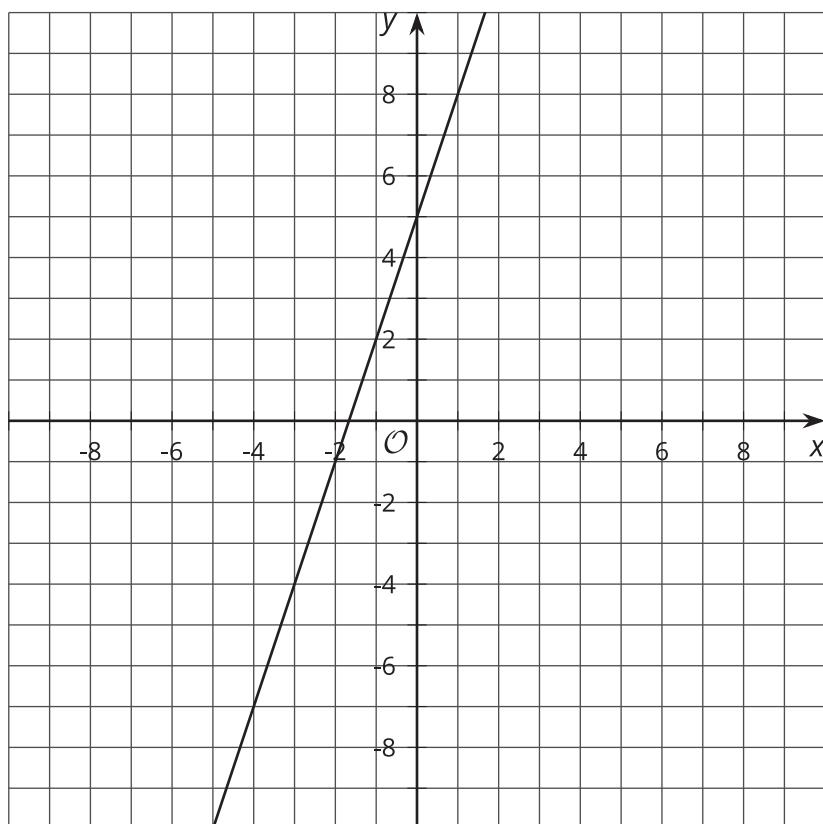
## 14.3 Finding More Lines

For each system of equations:

- Solve the system of equations by graphing. Write the solution as an ordered pair.
- Write an equation that would be represented by a vertical or horizontal line that also passes through the solution of the system of equations.
- Graph your new equation along with the system.

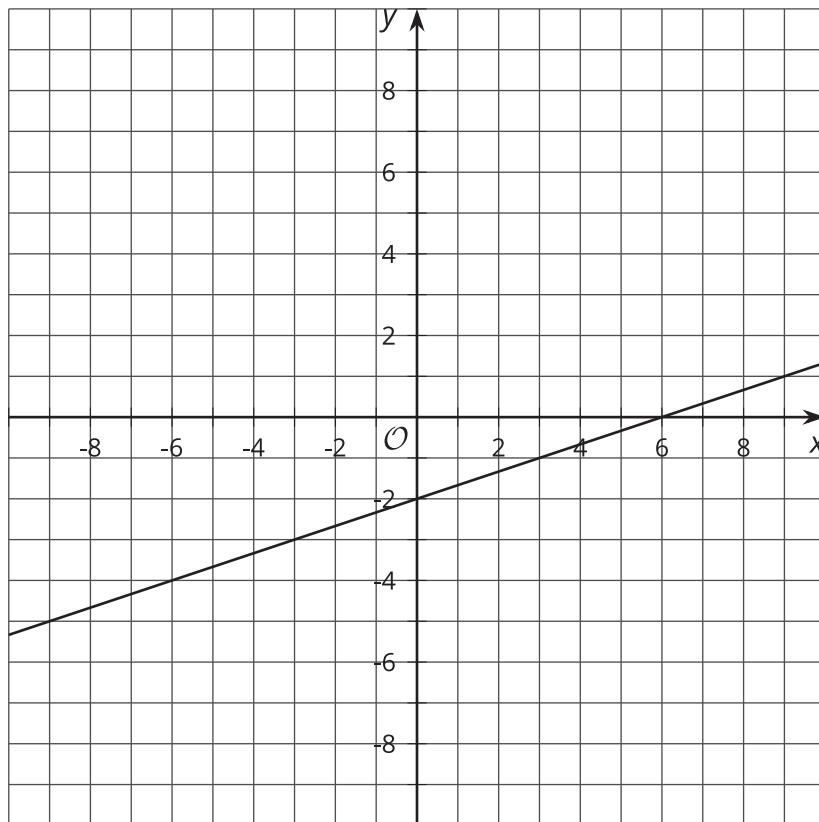
1. 
$$\begin{cases} y = 3x + 5 \\ y = -x + 1 \end{cases}$$

The line representing  $y = 3x + 5$  is shown.



2. 
$$\begin{cases} y = \frac{1}{3}x - 2 \\ y = x - 6 \end{cases}$$

The line representing  $y = \frac{1}{3}x - 2$  is shown.



3. 
$$\begin{cases} 2x + 3y = 10 \\ x + y = 3 \end{cases}$$

The line representing  $2x + 3y = 10$  is shown.

