Making More New, True Equations

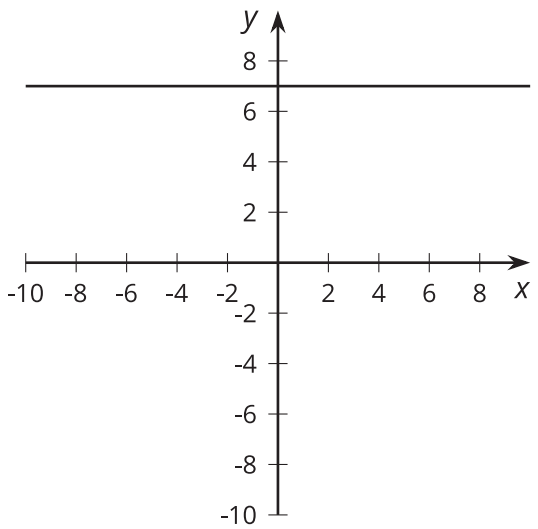
Let's practice combining like terms and working with horizontal and vertical lines.

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



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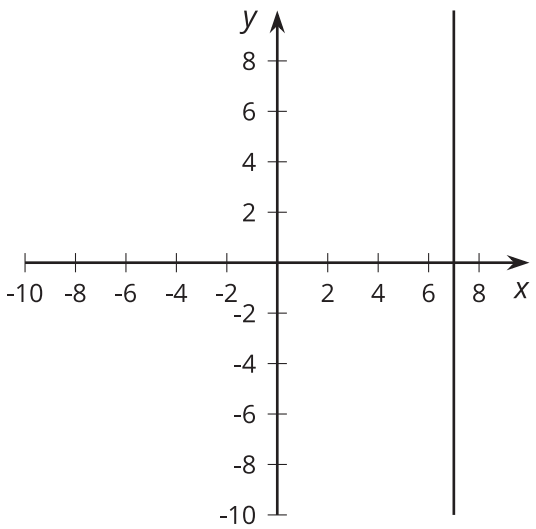

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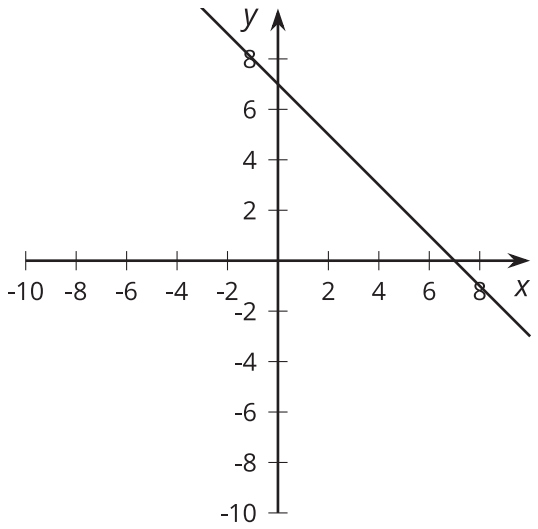

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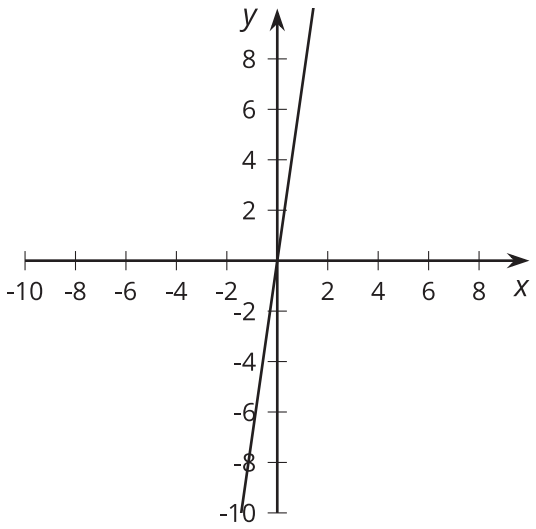

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14.2 They're Like Terms, Man

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

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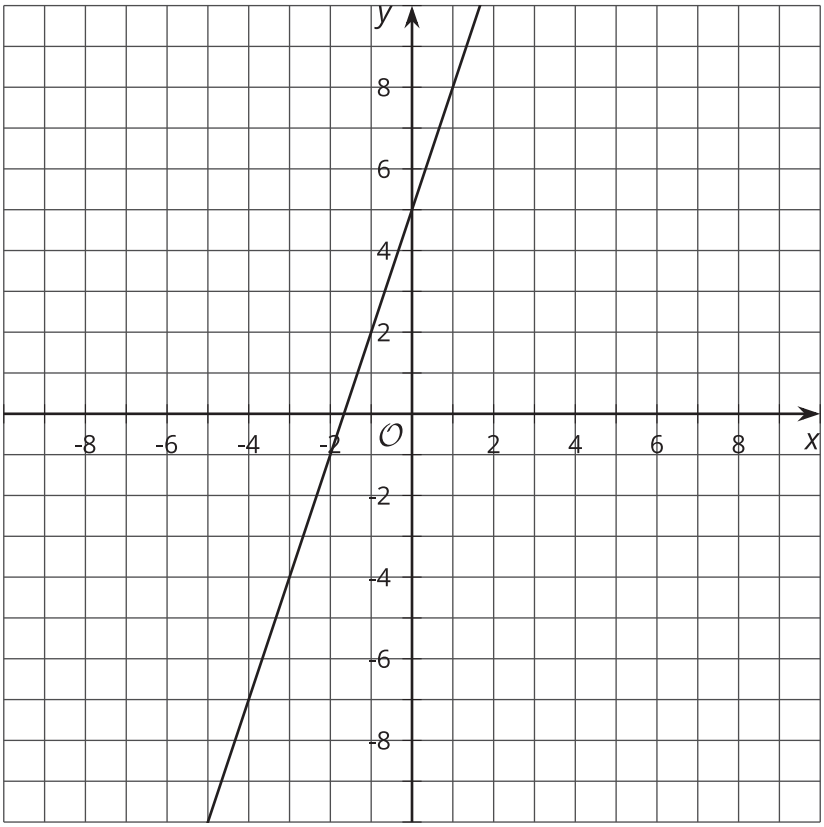
14.3 Finding More Lines

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.

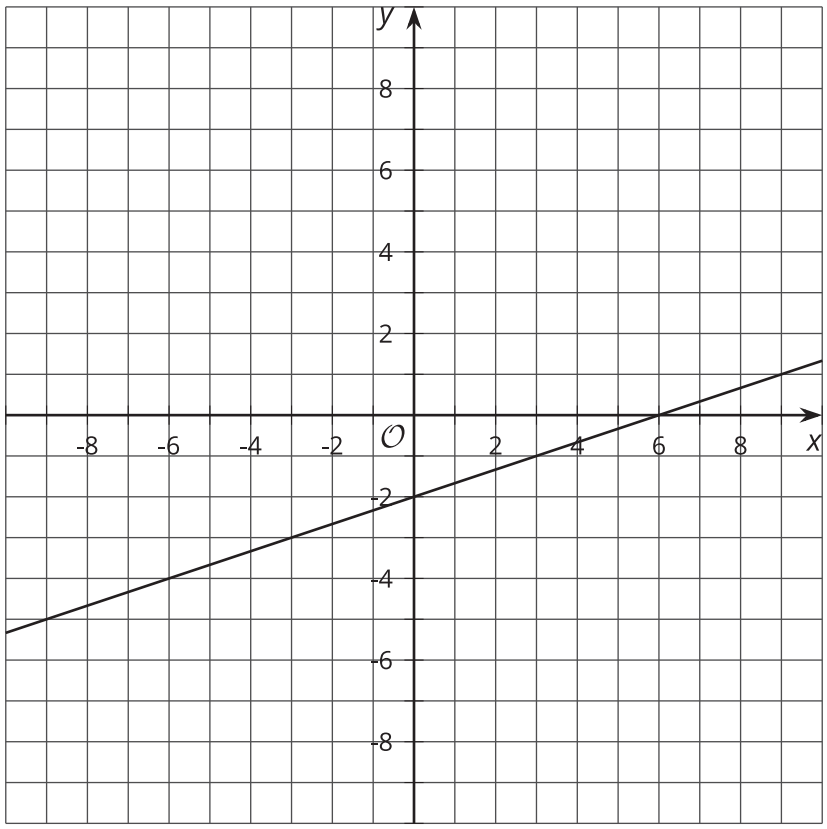
1. $\begin{cases} y = 3x + 5 \\ y = -x + 1 \end{cases}$

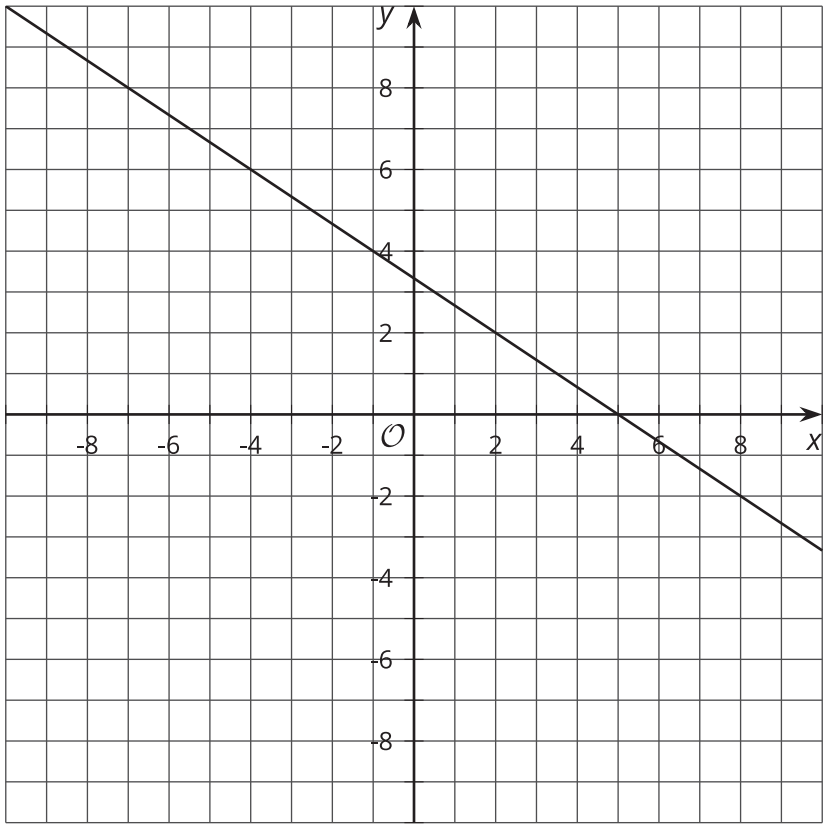
   The line representing $y = 3x + 5$ is shown.



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.