



Name _____ Date _____

**Skills Maintenance****Solving Equations With Variables****Activity 1**

Solve the equations by substituting the value for the variable.

1. Solve $y = 2x + 3$ for $x = -1$. _____
2. Solve $y = 3x - 1$ for $x = -2$. _____
3. Solve $y = 2x + 5$ for $x = 1$. _____
4. Solve $y = \frac{1}{2}x + 10$ for $x = 8$. _____

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Apply Skills

Slope Intercept Form: $y = mx + b$

Activity 1

Fill in the x/y table and make a graph for each of the functions written in slope-intercept form.

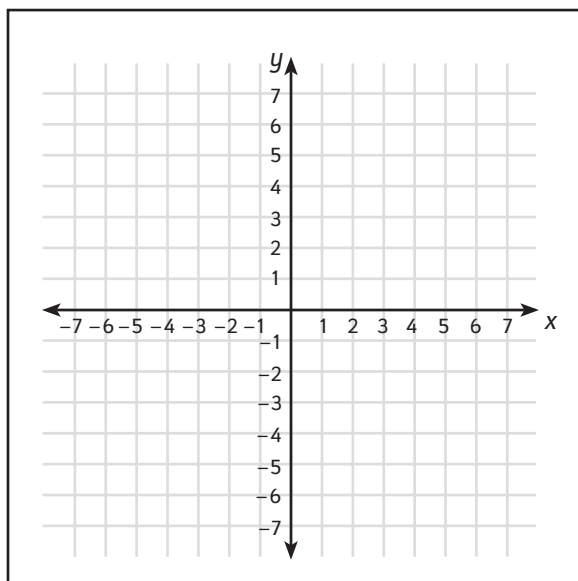
1. Function: $y = 2x + 2$

x	y

Draw the graph.

What is the slope? _____

What is the y -intercept? _____



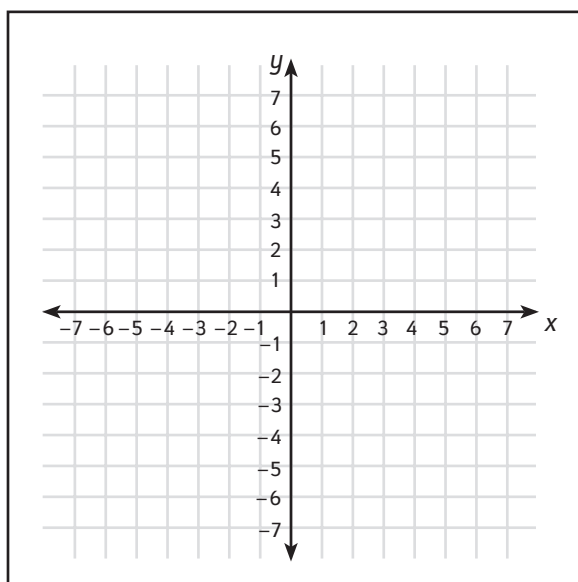
2. Function: $y = x - 2$

x	y

Draw the graph.

What is the slope? _____

What is the y -intercept? _____



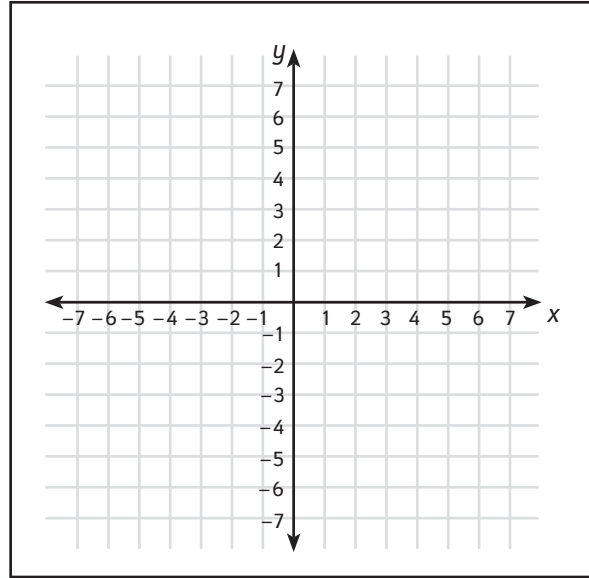


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3. Function: $y = \frac{1}{2}x + -1$

x	y

Draw the graph.
 What is the slope? _____
 What is the y -intercept? _____



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Problem-Solving Activity

Graphing Linear Equations

You learned about three kinds of slopes:

- Positive slope
- Negative slope
- Zero slope

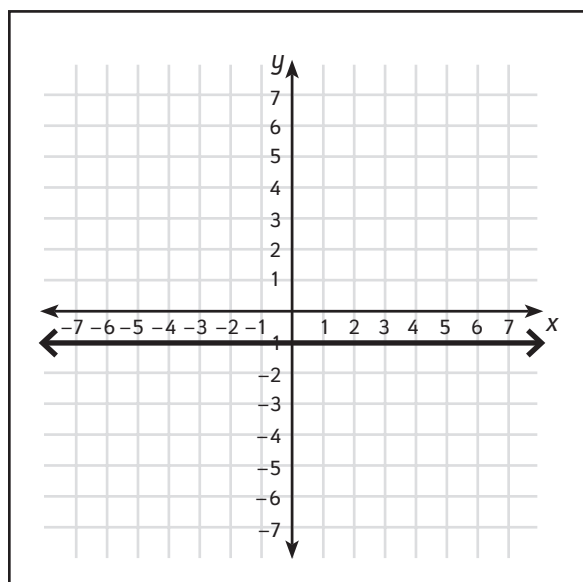
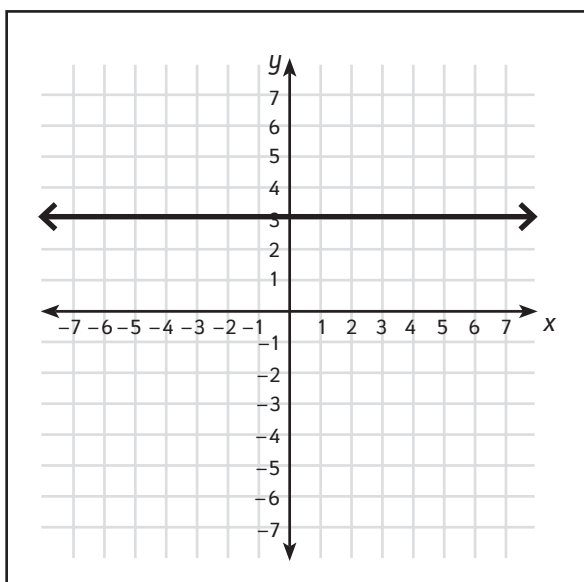
Match the functions with the graphs in each problem. Think about the direction of the line and rise-over-run when you figure out which function goes with what graph.

Functions:

$$y = -2x + 3 \quad y = 4x - 1 \quad y = 0x + 3 \quad y = -4x + 1 \quad y = 0x - 1$$

1. Which function goes with this graph?

2. Which function goes with this graph?



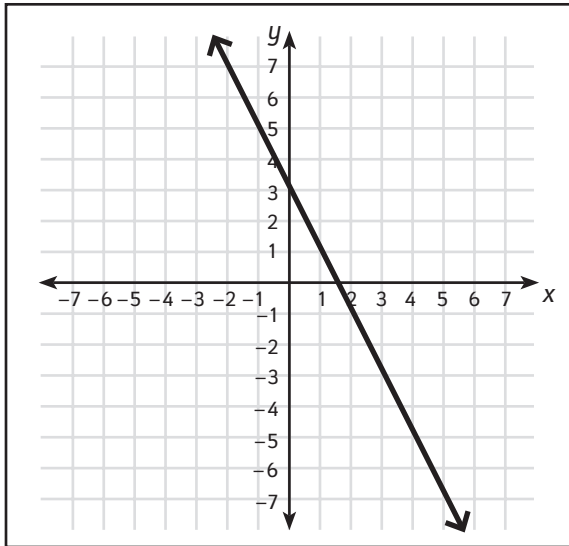
Explain the feature of the graph that helped you make this choice.

Explain the feature of the graph that helped you make this choice.



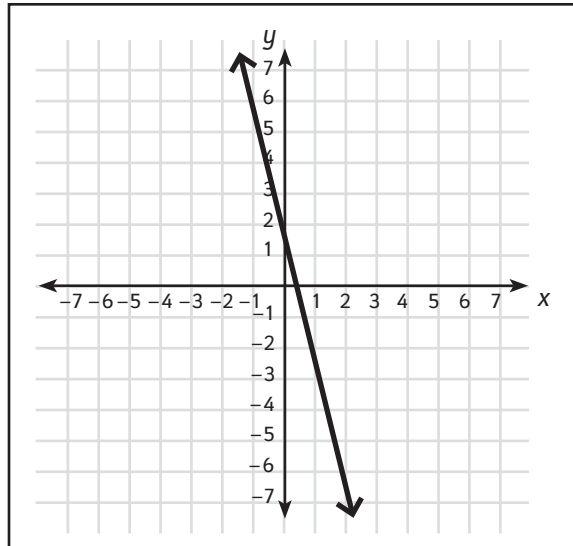
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3. Which function goes with this graph?



Explain the feature of the graph that helped you make this choice.

4. Which function goes with this graph?



Explain the feature of the graph that helped you make this choice.

5. Which function goes with this graph?

Explain the feature of the graph that helped you make this choice.

