

Name:

Date:

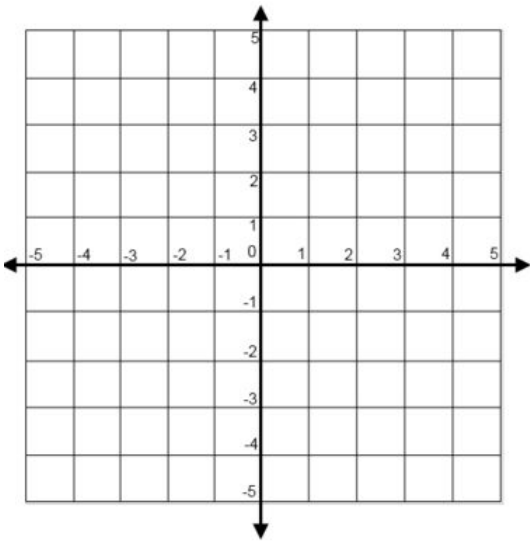
Understands how to describe qualitatively the functional relationship between two quantities by analyzing a graph.

Understands how to compare two linear functions (i.e. rate of change, etc.) with the same representation (algebraically, graphically, numerically in tables or by verbal description.)

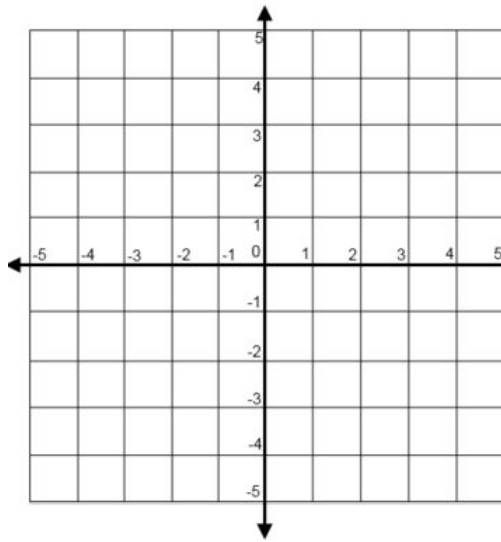
Level 2 (Retrieval)

Graph each function.

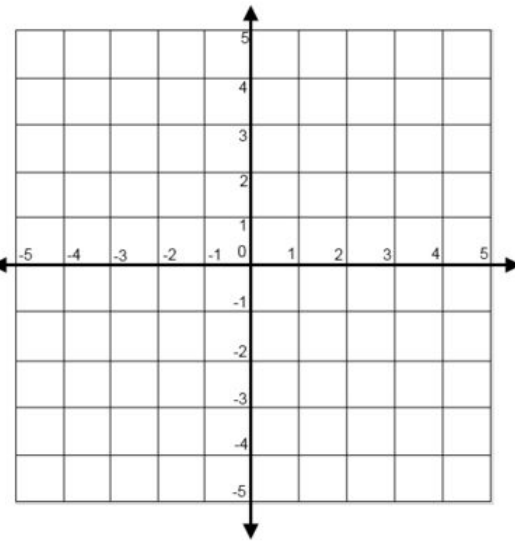
1) $x - y = 4$



2) $y = -\frac{2}{3}x + 1$

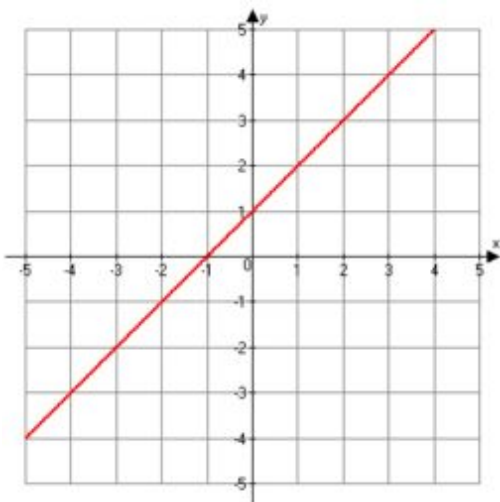


3) $y = 2(x - 3) + 1$

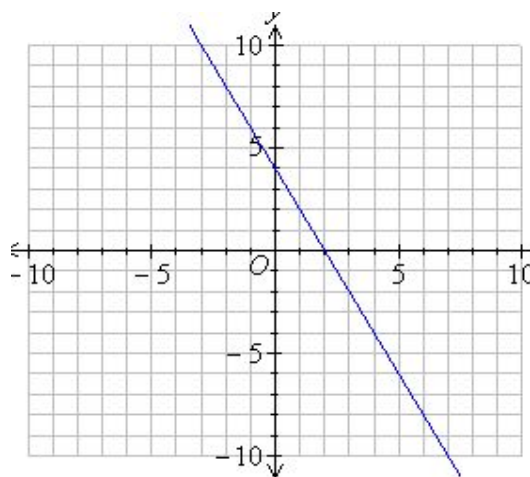


Write the equation for the function with the indicated form.

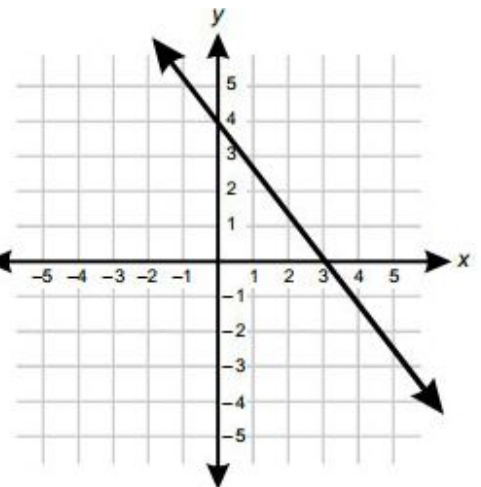
4) Standard Form



5) Slope-Intercept Form



6) Point-Slope Form



7) Convert the equation $3x - 4y = 24$ into slope-intercept form.

8) Convert the equation $y = -2(x - 3) + 4$ into standard form.

Identify whether the slope is positive, negative, or zero.

9) $y = 9$

10)

x	-2	-1	0	1	2	3	4
y	5	7	9	11	13	15	17

11) There are 10 inches of snow on the ground. The snow melts at a rate of .75 inches per day.

Level 3: (Integrating)

Identify the slopes and y-intercepts for each representation and then compare them. State whether the lines are parallel, perpendicular, or intersecting.

14)

A) $y = -3x + 5$	B) $y = -3x + 9$
Slope:	Slope:
Y-Intercept:	Y-Intercept:

The slope of equation A is _____ compared to the slope of equation B.

The y-intercept of equation A is _____ compared to the y-intercept of equation B.

The lines are _____.

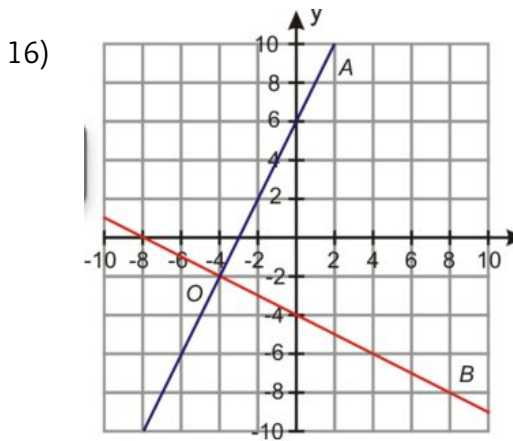
15)

<table border="1"> <thead> <tr> <th># van</th> <th># cars</th> </tr> </thead> <tbody> <tr><td>0</td><td>5</td></tr> <tr><td>1</td><td>4</td></tr> <tr><td>2</td><td>3</td></tr> <tr><td>3</td><td>2</td></tr> <tr><td>4</td><td>1</td></tr> <tr><td>5</td><td>0</td></tr> <tr><td>6</td><td>-1</td></tr> </tbody> </table>	# van	# cars	0	5	1	4	2	3	3	2	4	1	5	0	6	-1	<table border="1"> <thead> <tr> <th># van</th> <th># cars</th> </tr> </thead> <tbody> <tr><td>0</td><td>8</td></tr> <tr><td>1</td><td>6</td></tr> <tr><td>2</td><td>4</td></tr> <tr><td>3</td><td>2</td></tr> <tr><td>4</td><td>0</td></tr> <tr><td>5</td><td>-2</td></tr> <tr><td></td><td></td></tr> </tbody> </table>	# van	# cars	0	8	1	6	2	4	3	2	4	0	5	-2		
# van	# cars																																
0	5																																
1	4																																
2	3																																
3	2																																
4	1																																
5	0																																
6	-1																																
# van	# cars																																
0	8																																
1	6																																
2	4																																
3	2																																
4	0																																
5	-2																																
Slope:	Slope:																																
Y-Intercept:	Y-Intercept:																																

The slope of equation A is _____ compared to the slope of equation B.

The y-intercept of equation A is _____ compared to the y-intercept of equation B.

The lines are _____.



The slope of A is _____ compared to the slope of B.

The y-intercept of A is _____ compared to the y-intercept of B.

The lines are _____.

Slope (A)	Slope (B)
Y-Intercept (A)	Y-Intercept (B)

17) (A) Julie is saving money for spring vacation. She currently has \$60 and earns \$20 each day she babysits after school for a neighbor.

(B) John is also saving money for a motorcycle. He currently has \$80 and earns \$15 each afternoon he works at the local store.

Slope (A)	Slope (B)
Y-Intercept (A)	Y-Intercept (B)

The slope of equation A is _____ compared to the slope of equation B.

The y-intercept of equation A is _____ compared to the y-intercept of equation B.

The lines are _____.

Level 4: (Comparing and Decision Making)

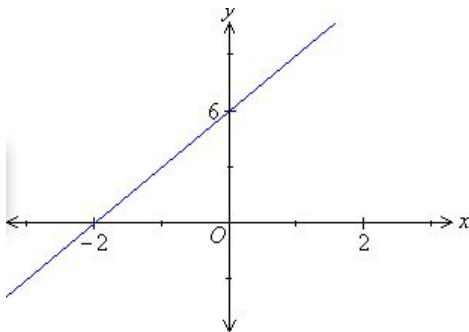
Talk-A-Lot: This company offers a plan for \$20 a month. Each minute that is used costs \$0.25.

Chatterbox: $y = 0.5x + 50$

Gabby:

X	10	15	20	25	30
Y	15	20	25	30	35

Silent-No-More:



18) Which phone company has the best rate?

19) Which phone company has the lowest initial cost?

20) Which phone company is the best if you are going to talk for 100 minutes or more?