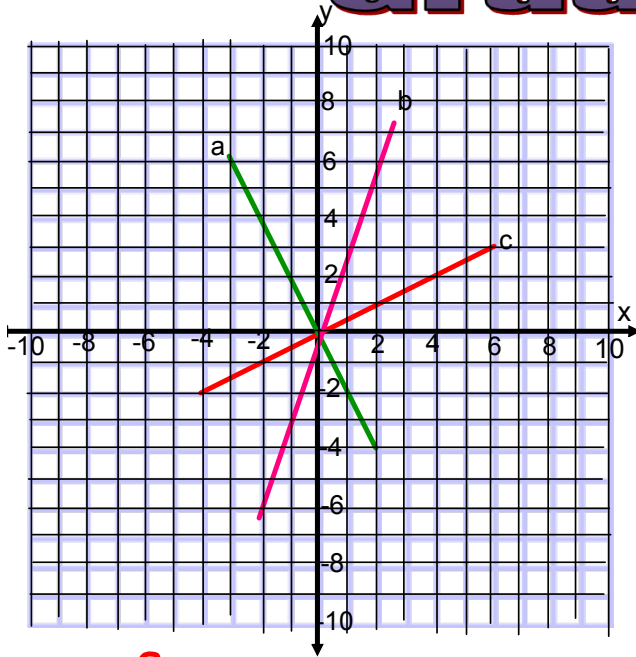


Warm-Up Grade 9



Method 1:

Use a table of values to match the following equations to the correct graph.

C
i) $y = \frac{1}{2}x$

$\Delta x = 2$ $\Delta y = 1$

x	y
-2	-1
0	0
2	1

A
ii) $y = -2x$

$\Delta x = 1$ $\Delta y = -2$

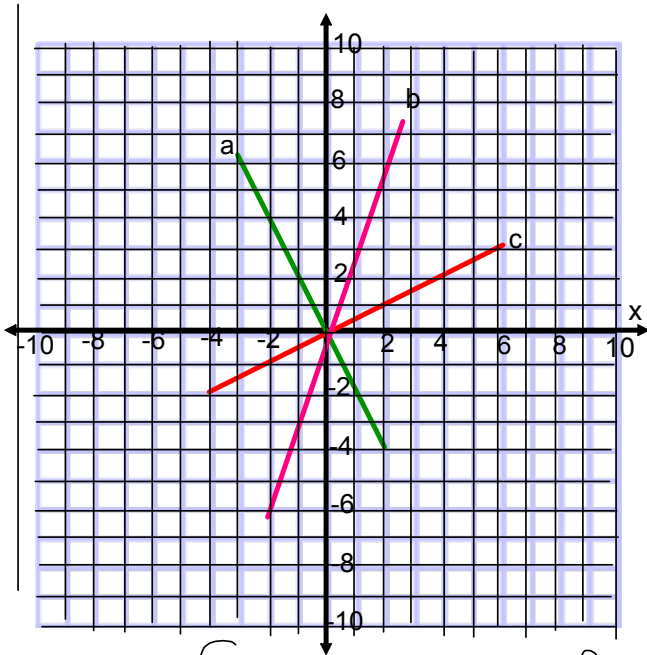
x	y
-1	2
0	0
1	-2

B
iii) $y = 3x$

$\Delta x = 1$ $\Delta y = 3$

x	y
-1	-3
0	0
1	3

Warm-Up Grade 9



Method 2:
Use slope and a point

$$\frac{\Delta y}{\Delta x} = \frac{3}{1}$$

C
i) $y = \frac{1}{2}x$

Slope = $\frac{1}{2}$ ↑
x = 0 →
(0,0)

A
ii) $y = -2x$

Slope = $-\frac{2}{1}$ ↓
x = 0 →
(0,0)

B
iii) $y = 3x$

Slope = $\frac{3}{1}$ ↑
x = 0 → ●
(0,0)

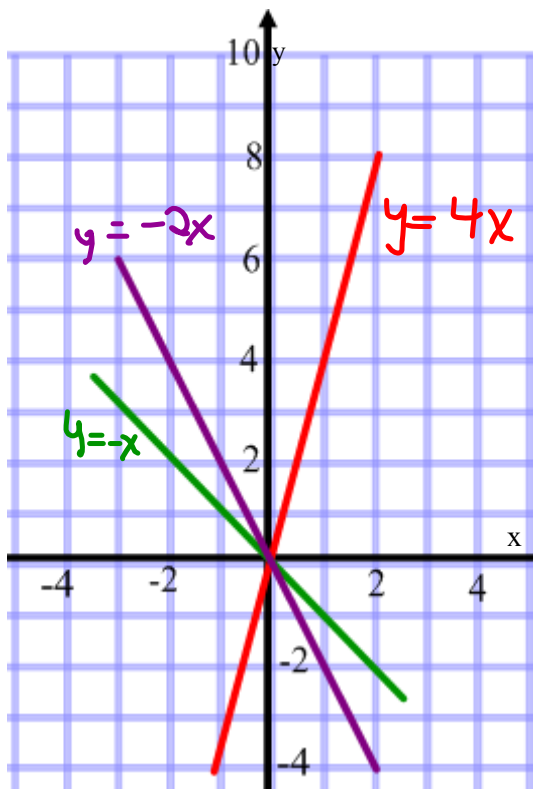
Homework

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#3 - #9



Matching Equations with Graphs that Pass Through the Origin



Match each graph on the grid with its equation

(Use the previous slide to help answer)

$$y = -x$$

Slope = $-\frac{1}{1}$
 $x = 0$
 $(0,0)$

$$y = 4x$$

Slope = $\frac{4}{1}$
 $x = 0$
 $(0,0)$

$$y = -2x$$

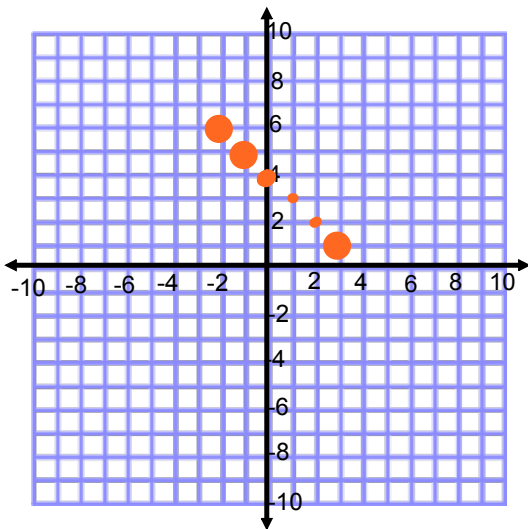
Slope = $-\frac{2}{1}$
 $x = 0$
 $(0,0)$

Graph the following using the point-slope formula

$$x + y = 4$$

$$y = -x + 4$$

$$\frac{\Delta y}{\Delta x} = \frac{-1}{1} = -1 \quad (0, 4)$$

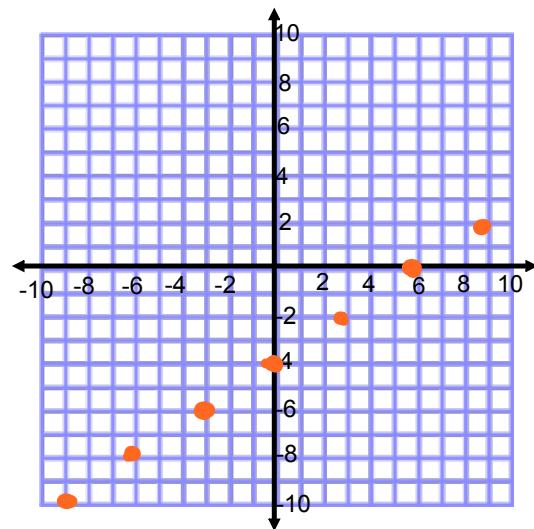


$$2x - 3y = 12$$

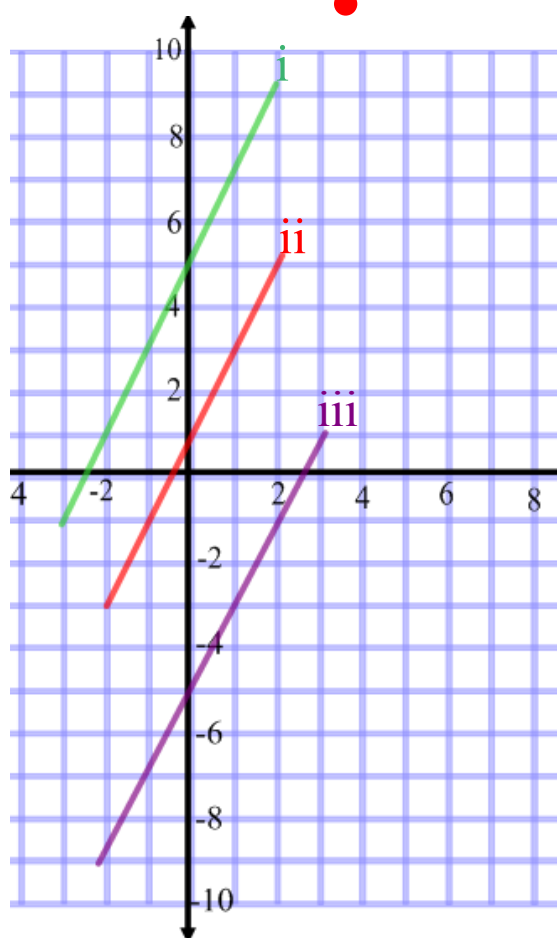
$$-3y = -2x + 12$$

$$y = -\frac{2}{3}x - 4$$

$$\frac{\Delta y}{\Delta x} = \frac{2}{3} = -\frac{2}{3} \quad (0, -4)$$



Which graph represents the equation?



Which graph represents $y = 2x - 5$?

MUST JUSTIFY
your answer

$$\text{Slope} = \frac{2}{1}$$

$$(0, -5)$$

$$(iii)$$

Homework

page 188 - 190

Questions 11a,b,c, 12, 13

worksheet



odd numbers



Math 9

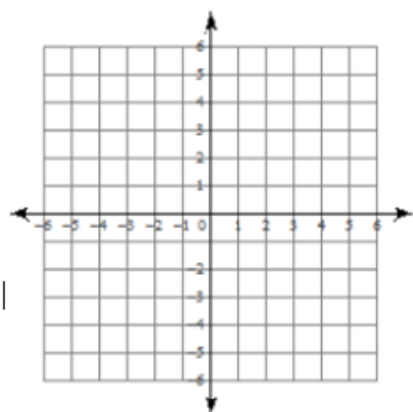
Name _____

Graphing Equations

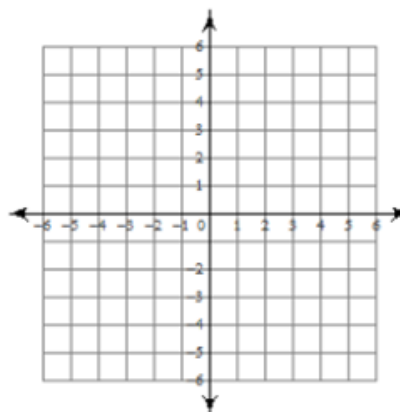
Date _____

Sketch the graph of each line.

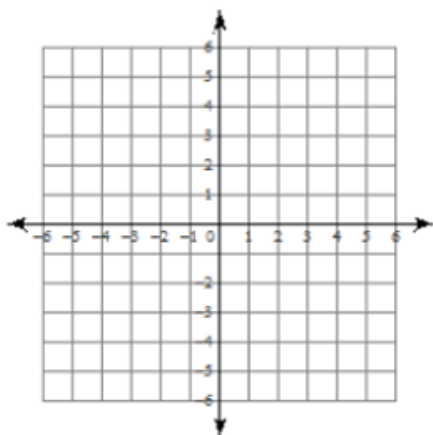
1) $y = -x + 4$



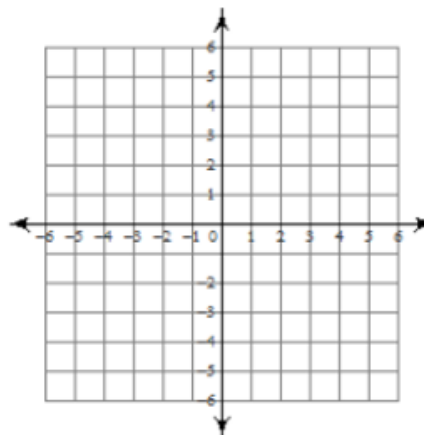
2) $y = 2x + 3$



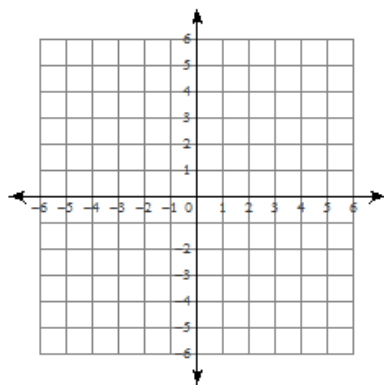
3) $y = \frac{1}{3}x + 2$



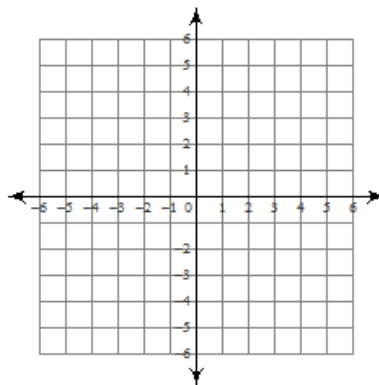
4) $y = \frac{1}{5}x - 2$



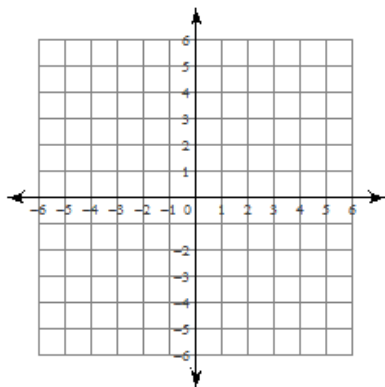
5) $x - y = 2$



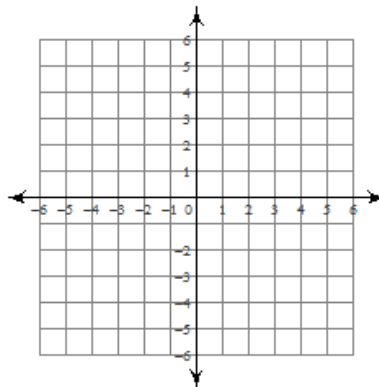
6) $2x + y = 0$



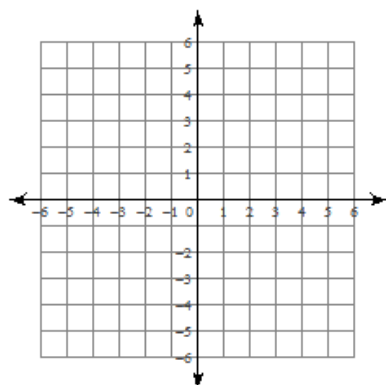
7) $x + 2y = 4$



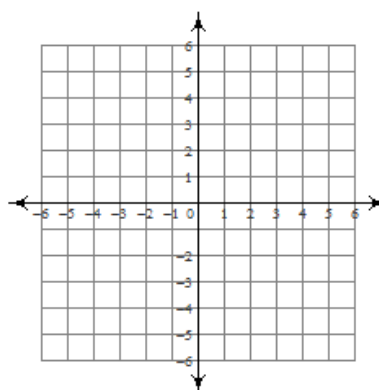
8) $x - 3y = -9$



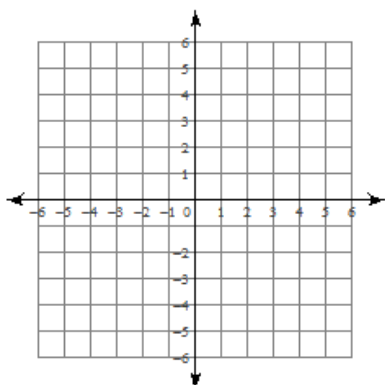
9) $y = 5 + 3x$



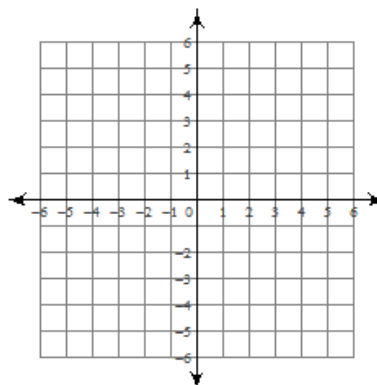
10) $0 = y + \frac{5}{4}x$



11) $14x + 10y = -40$



12) $-y = 2 + x$



Attachments

Graphing Equations.ks-ipa

Graphing Equation_ws.docx