

NAME _____

Key

Drawing Lines from "y=mx+b"

Directions: For each of the following, draw the graph.

Examples:

$m = \frac{\uparrow 3}{\rightarrow 1}$

$m = \frac{\uparrow 2}{\rightarrow 3}$ $b = (0, 1)$

$m = \frac{\downarrow 4}{\rightarrow 1}$

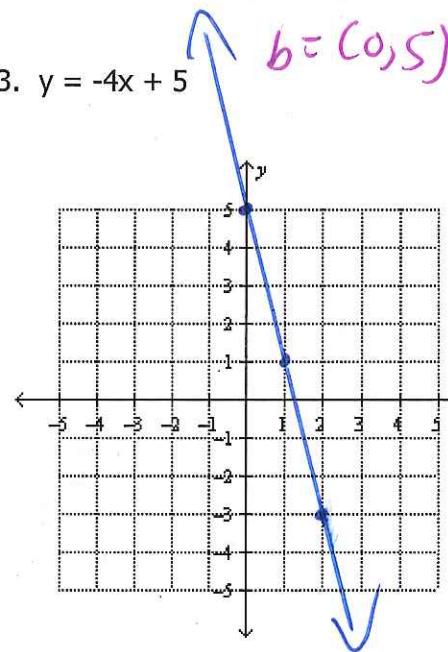
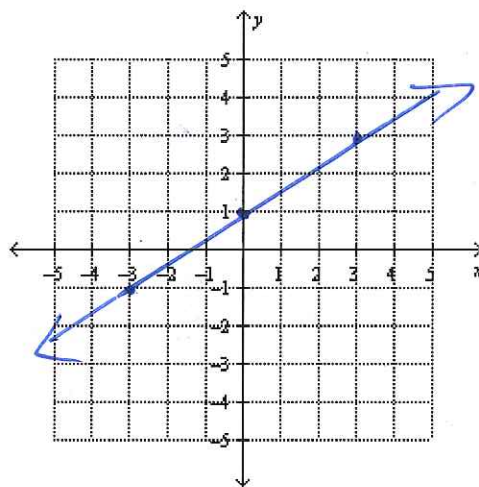
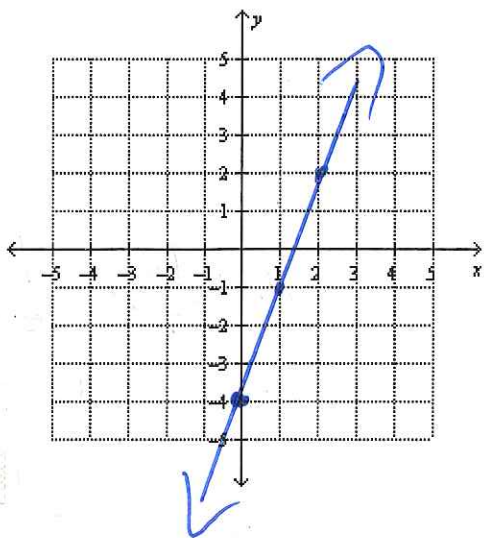
1. $y = 3x - 4$

$b = (0, -4)$

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

3. $y = -4x + 5$

$b = (0, 5)$



Now you try...

4. $y = 2x - 3$

$m = \frac{\uparrow 2}{\rightarrow 1}$ $b = (0, -3)$

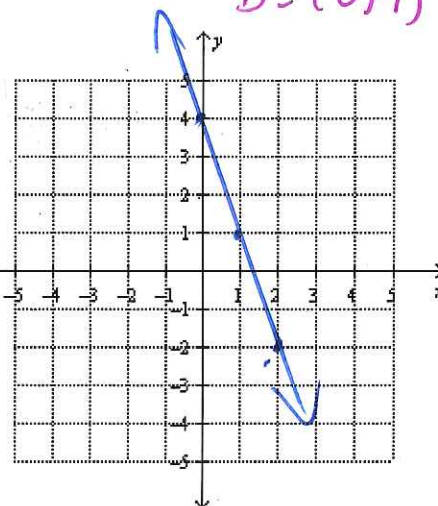
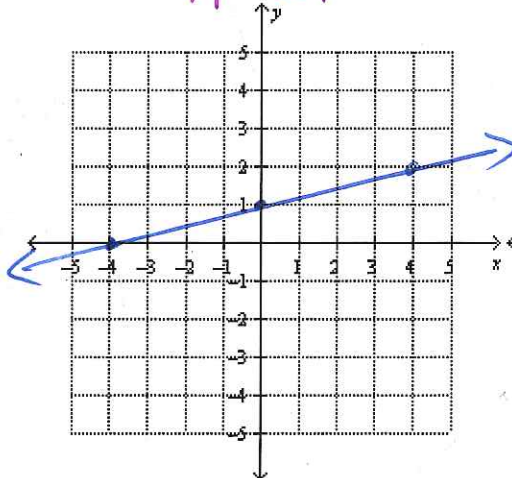
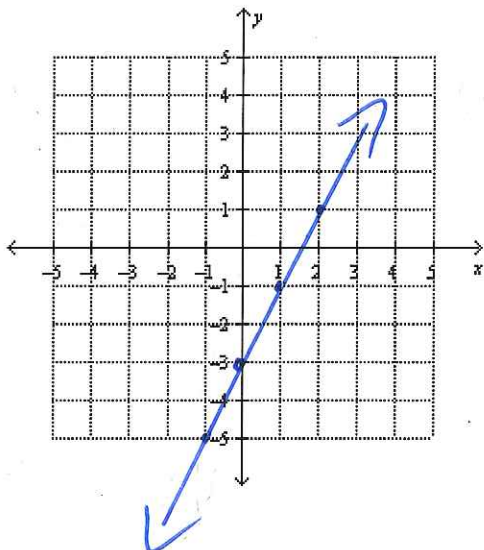
5. $y = \frac{1}{4}x + 1$

$m = \frac{\uparrow 1}{\rightarrow 4} = \frac{1}{4}$ $b = (0, 1)$

6. $y = -3x + 4$

$m = \frac{\downarrow 3}{\rightarrow 1}$

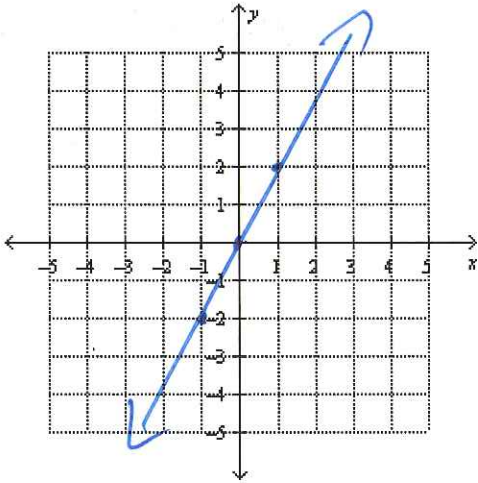
$b = (0, 4)$



Now let's look at some special cases...

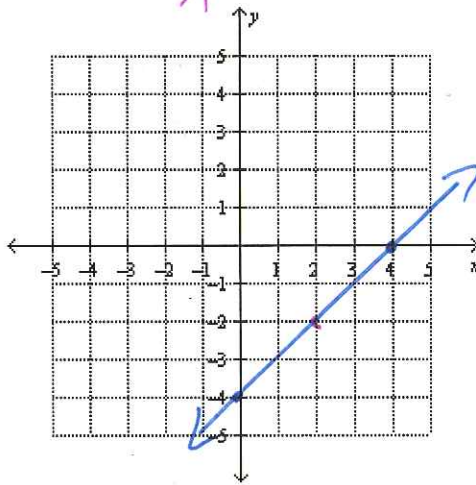
7. $y = 2x$

$m = \frac{\uparrow 2}{\rightarrow 1}$
 $b = (0, 0)$



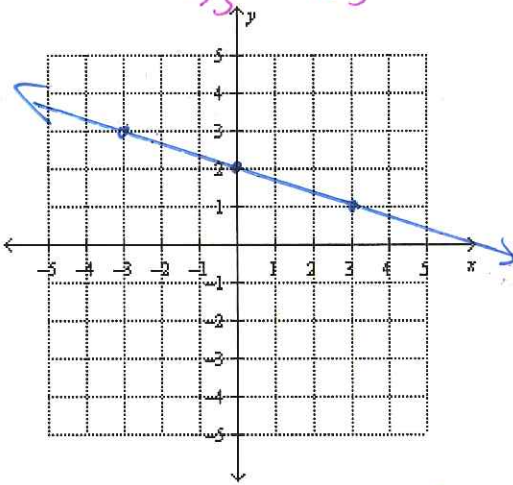
8. $y = x - 4$

$m = \frac{\uparrow 1}{\rightarrow 1}$ $b = (0, -4)$



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

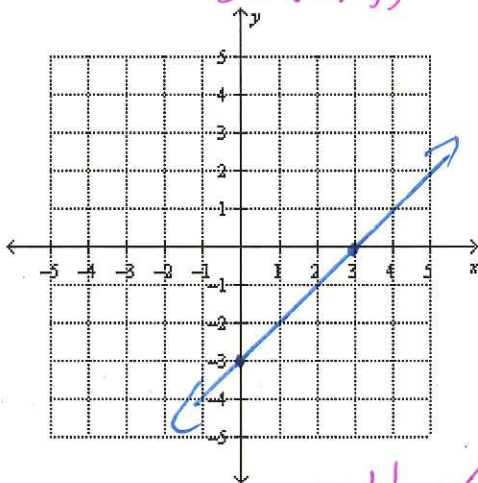
$b = (0, 2)$
 $m = \frac{\downarrow 1}{\rightarrow 3} = \frac{\uparrow 1}{\leftarrow 3}$



Now you try...

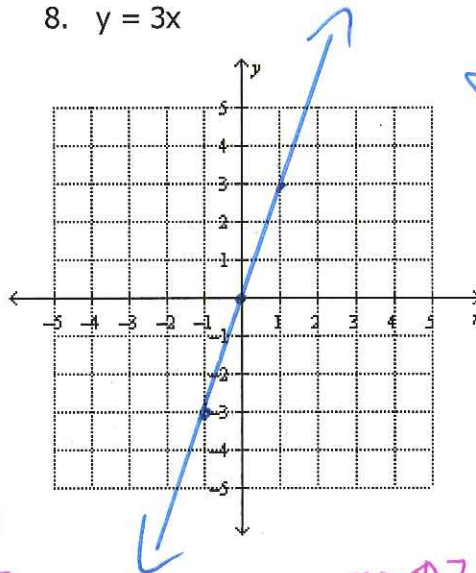
7. $y = x - 3$

$m = \frac{\uparrow 1}{\rightarrow 1}$
 $b = (0, -3)$



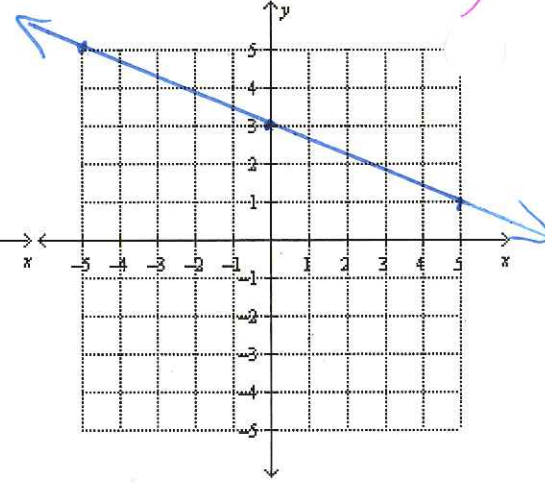
8. $y = 3x$

$m = \frac{\uparrow 3}{\rightarrow 1}$ $b = (0, 0)$



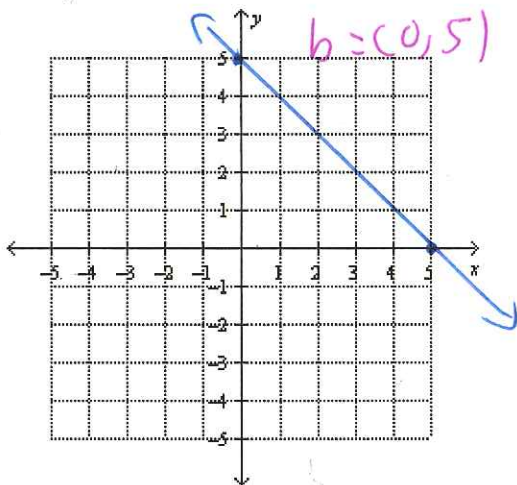
9. $y = -\frac{2}{5}x + 3$

$m = \frac{\downarrow 2}{\rightarrow 5} = \frac{\uparrow 2}{\leftarrow 5}$
 $b = (0, 3)$



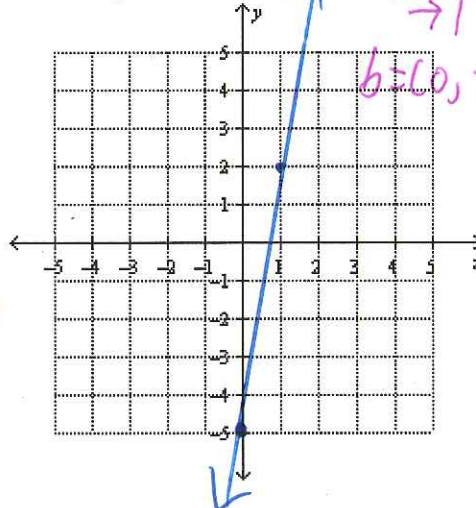
10. $y = -x + 5$

$m = \frac{\downarrow 1}{\rightarrow 1} = \frac{\uparrow 1}{\leftarrow 1}$
 $b = (0, 5)$



11. $y = 7x - 5$

$m = \frac{\uparrow 7}{\rightarrow 1}$
 $b = (0, -5)$



12. $y = -3x$

$m = \frac{\downarrow 3}{\rightarrow 1}$
 $b = (0, 0)$

