

1.

$$f(0) = 3$$

$$b = 3$$

$$(0, 3)$$

$$f(2) = 0$$

$$a = 2$$

$$(2, 0)$$

The y -intercept is always in the form of $(0, b)$. The x -intercept is always in the form $(a, 0)$. First look for the zeros in the table, if the 0 is first it is the y -intercept, if a number is first, it is the x -intercept.

2.

 x -intercept:

$$f(a) = \frac{5}{2}(a) - 10$$

$$0 = \frac{5}{2}a - 10$$

$$10 = \frac{5}{2}a$$

$$4 = a$$

$$(4, 0)$$

 y -intercept:

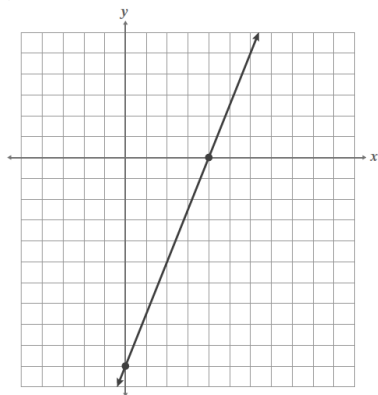
$$f(0) = \frac{5}{2}(0) - 10$$

$$f(0) = -10$$

$$b = -10$$

$$(0, -10)$$

3.



$$m = \frac{5}{2}$$

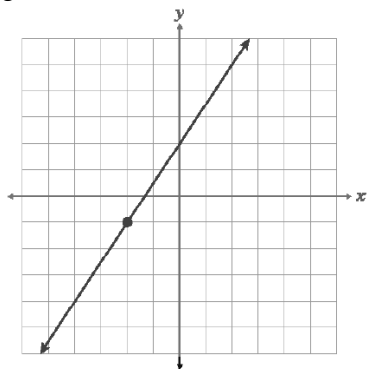
The points $(4, 0)$ and $(0, -10)$ should be marked on the graph.

4.

$$m = -\frac{1}{2}$$

As the x -values increase by 2, the y -values decrease by 1.

5.

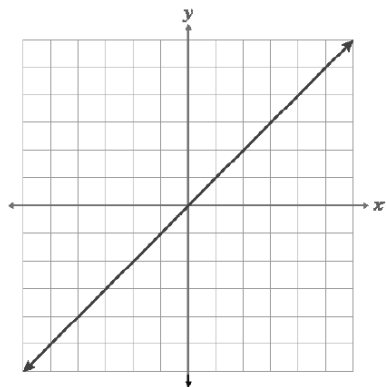


6.

$$f(x) = x$$

x	$f(x)$
-3	-3
0	0
1	1

7.



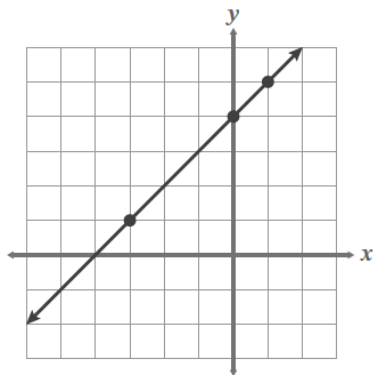
8.

x	$f(x) = x$	$g(x) = x + \frac{1}{4}$
-8	-8	$-7\frac{3}{4} = -\frac{31}{4}$
$-\frac{1}{4}$	$-\frac{1}{4}$	0
$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{2}$
20	20	$20\frac{1}{4} = \frac{81}{4}$

9.

Translating the graph $f(x)$ up $\frac{1}{4}$ unit will create the graph $g(x)$.

10.



11.

Sample: If you want the parent function to move up, the value of b added to the parent function will be positive. If you want the parent function to move down, the value of b added to the parent function will be negative.