1.

y-intercept: $4(0) + 10b = 30$

$10b = 30$

$b = 3$

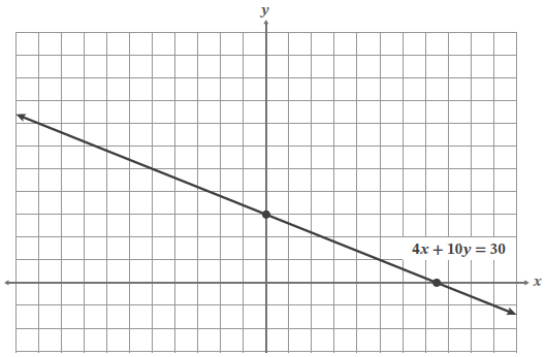
point: $(0, 3)$

x-intercept: $4a + 10(0) = 30$

$4a = 30$

$a = \frac{15}{2}$

point: $(\frac{15}{2}, 0)$



2.

$3x + y = -3$

3.

$-\frac{1}{2}x + \frac{1}{3}y = \frac{1}{4}$; LCD: -12

$-12(-\frac{1}{2}x + \frac{1}{3}y = \frac{1}{4})$

$6x - 4y = -3$

4.

$y - 4 = \frac{6}{7}(x + 14)$

$y - 4 = \frac{6}{7}x + 12$

$y = \frac{6}{7}x + 16$

$-\frac{6}{7}x + y = 16$

$-7(-\frac{6}{7}x + y = 16)$

$6x - 7y = -112$

5.

$m = -(\frac{A}{B})$, $b = \frac{C}{B}$

Line a	$m = -(\frac{5}{-7}) = \frac{5}{7}$	$b = -\frac{15}{7} = -2\frac{1}{7}$
Line b	$m = \frac{7}{5}$	$b = -4$
Line c	$m = -\frac{7}{5}$	$b = -\frac{15}{5} = -3$

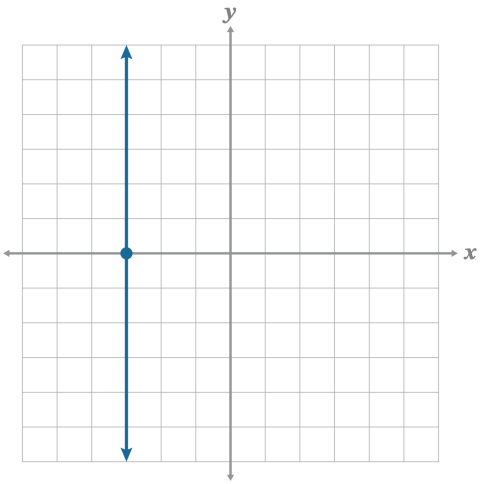
6.

Line b, Line c, Line a

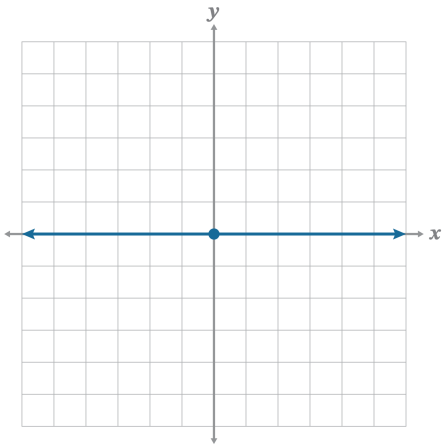
7.

Line c, Line a, Line b

8.
vertical line, $x = -3$



9.
horizontal line, $y = 0$, (this is the x-axis)



10.
$x = 3$, domain: $\{3\}$, range: $\{\mathbb{R}\}$

11.
$y = -2$, domain: $\{\mathbb{R}\}$, range: $\{-2\}$

12.
$(3, -2)$