Example 1

2x +4y = 8

Let y = 0

2x +4y = 8

2x +4(0) = 8

2x + 0 = 8

$\frac{2x}{2} = \frac{8}{2}$

x = 4

The x intercept is: (4,0)

Let x = 0

2x +4y = 8

2(0) +4y = 8

0 + 4y = 8

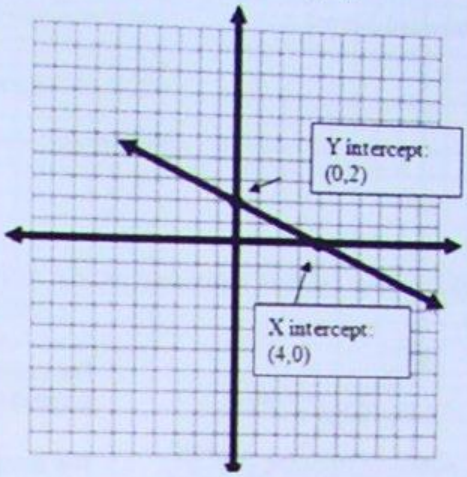
$\frac{4y}{4} = \frac{8}{4}$

y= 2

The y intercept is: (0, 2)

The x intercept is: (4,0)

The y intercept is: (0, 2)



You can also represent the x and y intercepts in a table.

x	y
4	0
0	2

(x, y)

Use the x and y intercepts to graph the equations.

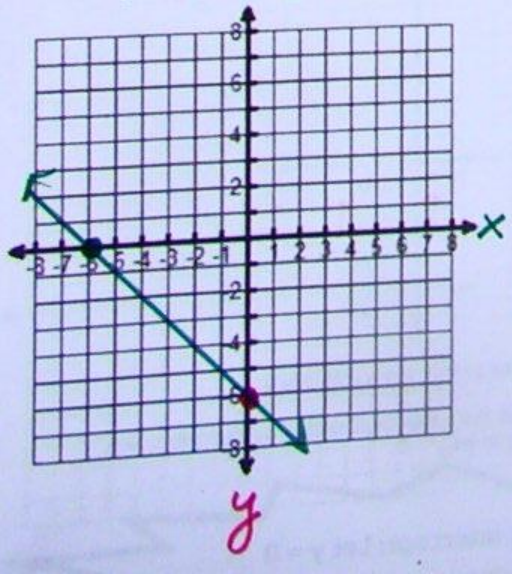
1) $x + y = -6$

0 + y = -6

y-intercept: (0 , -6)

x-intercept: (-6, 0)

x + 0 = -6



2) $6x - 3y = 24$

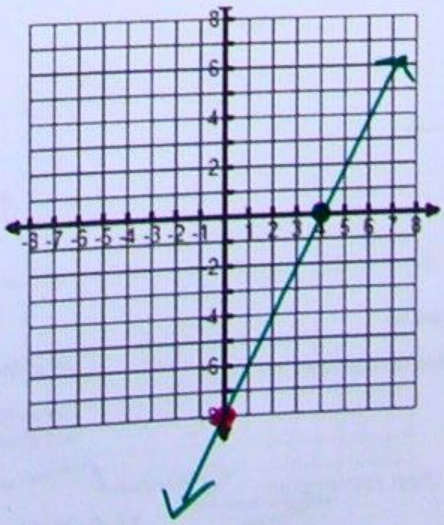
6x + 0 = 24

0 - 3y = 24

x	y
0	-8
4	0

y-int

x-int



3) $-2x + y = -8$

-2x + 0 = -8

0 + y = -8

y-intercept: (0 , -8)

x-intercept: (4 , 0)