



- 1) What is the x-intercept of this graph? List this as a coordinate point.
- 2) What is the y-intercept of this graph? List this as a coordinate point.

We can also find x and y intercepts from an equation. Did you notice that in the problem above, when listing the x-intercept, the y-coordinate is zero. When listing the y-intercept, the x-coordinate is zero. We can use this to help us find intercepts.

Example: Find the x – intercept and y-intercept of the equation $4x + 5y = 20$.

Let's find the x-intercept first.

Step 1: Since the y-coordinate is zero when listing the x-intercept, we will replace y with zero in our equation:

$$4x + 5(0) = 20$$

Step 2: Now we just solve for x:

$$4x + 5(0) = 20$$

$$4x + 0 = 20$$

$$\frac{4x}{4} = \frac{20}{4}$$

$$x = 5$$

So we just found out that the x-intercept happens at (5, 0)

Now let's find the y-intercept.

Step 1: Since the x-coordinate is zero when listing the y-intercept, we will replace x with zero in our equation:

$$4(0) + 5y = 20$$

Step 2: Now we just solve for y:

$$4(0) + 5y = 20$$

$$0 + 5y = 20$$

$$\frac{5y}{5} = \frac{20}{5}$$

$$y = 4$$

So we just found out that the y-intercept happens at (0, 4)

On the back of this worksheet, you will find practice problems. If you get stuck, look back to this front side to help you.

Find the x and y intercepts of the following equations.

1) $2x + y = 2$

2) $3x - 5y = 15$

3) $3x - 2y = 6$

4) $x + y = -5$

5) $12x - 8y = 16$

6) $4x + 8y = -24$