

Linear Equations in 2 variables 12.2.16.

Go over HW

Warm up

Emily tells you that she scored 32 points in a basketball game. Write down all the possible ways she could have scored 32 with only 3 and 2 point baskets. Use the table below to organize your work.

Work on creating the equation together. What letter should we use to represent the number of 2 point baskets she made? What letter should we use to represent the number of 3 point baskets she made. $2x+3y=32$

An equation with two variables is called a linear equation. It can be symbolized as $ax + by = c$. More specifically this is called standard form.

Since 2 and 3 are constants we are looking for a pair of numbers to plug into x and y to make the equation true. For example if plugged in 50 for x and 0 for y the equation would not work.

One way to solve these equations is to pick a stationary number for x and then solve for y.

So given the equation $-50x + y = 15$. Let us make $x=5$ We know how to solve this for y correct. So let us do that. What does y equal. $y= 265$

Why don't you guys try the same equation and let $y=10$ What does x equal?

Complete exercises 1,2, and 3. 4 is a challenge problem so try that if you get 1 2 and 3 correct.