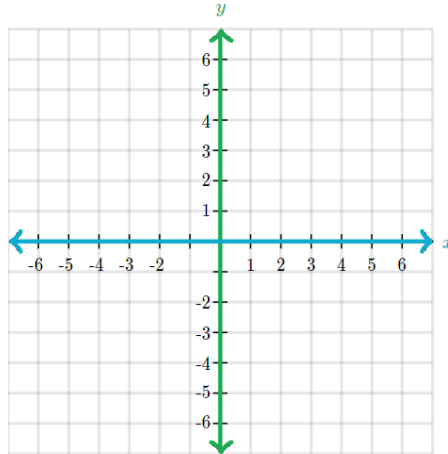


Sec. 6.3: Graphing Linear Relations

Setting up our graphs properly:

The coordinate plane is divided into _____ by its two axes:

- a _____ axis for the _____ variable
- a _____ axis for the _____ variable.



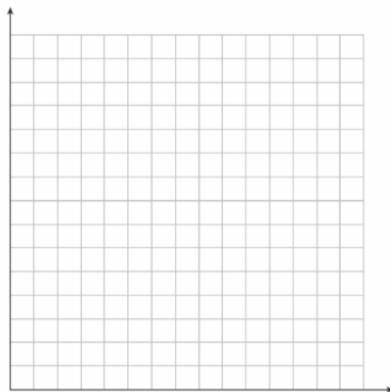
The point where the two axes cross is called the "_____".

The **(x, y)** coordinates of the origin are _____.

The means the **scales** on the axes must both begin at _____.

When we graph in the coordinate plane, whether we use all 4 quadrants or not is determined by what kind of data we are graphing.

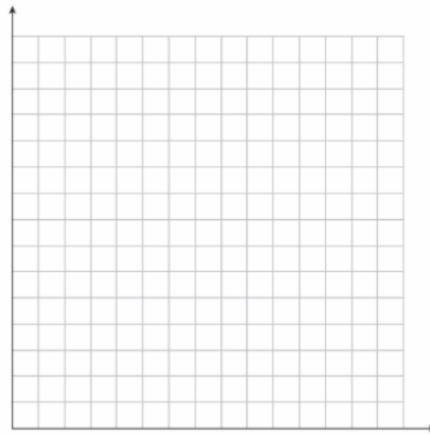
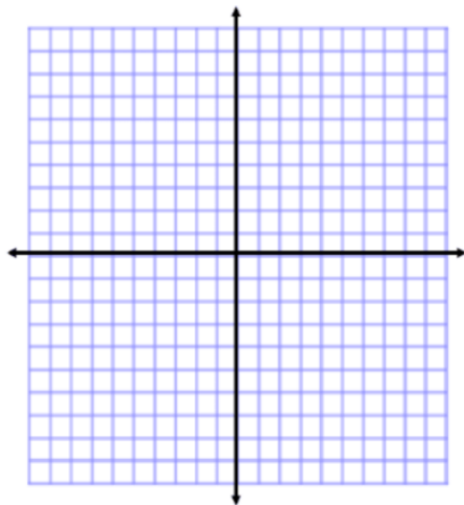
"real-world" data involving things that can't be negative have graphs in the first quadrant only.



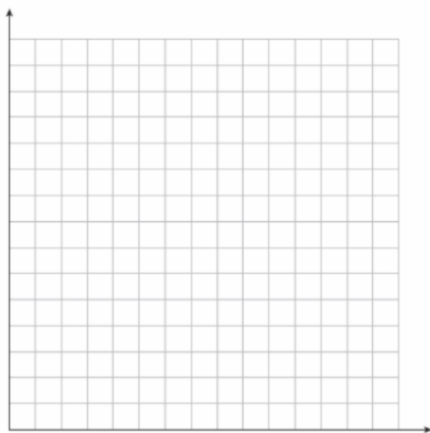
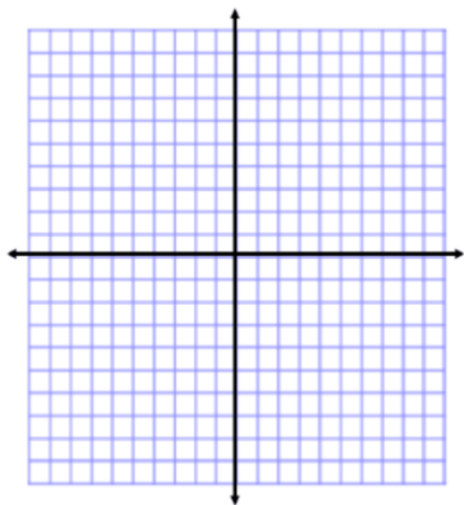
The numbers used in the scales will depend on the data from the relation. No matter how big or small our numbers will get on the scales, we have to have _____
_____.

The numbers of our scales must line up _____,
not _____ the grid lines.

Uniform increments:



Non-uniform increments:



Example:

A cell phone company charges a \$20.00 flat fee per month plus \$0.05 for every minute used for calls.

There is a linear relation that compares the monthly cost of the cell phone with the number of minutes used for calls.

N = number of minutes of calls

C = monthly cost

- Which is the independent variable?

- Which is the dependent variable?

Set up the coordinate plane for this relation:

label the axes

put appropriate scales on the axes

