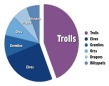
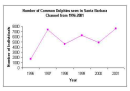
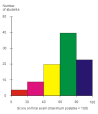
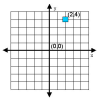
Lesson 3

Graphs textbook page 21



A graph is a type of representation of a situation that uses points, a line or a sequence of lines to provide an overview of the situation and facilitate its analysis

In order to draw a graph you need to have a table of values (info. in a chart) of a particular situation.

With a table of values , a kind of generalization begins to take shape.

For a table of values to be correct, its rule must always work.

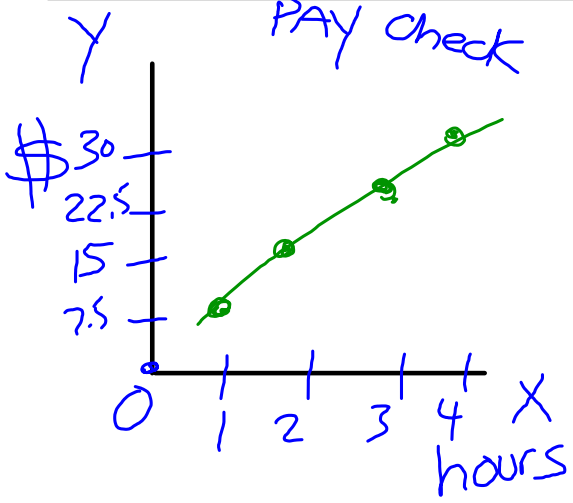
Table of Values

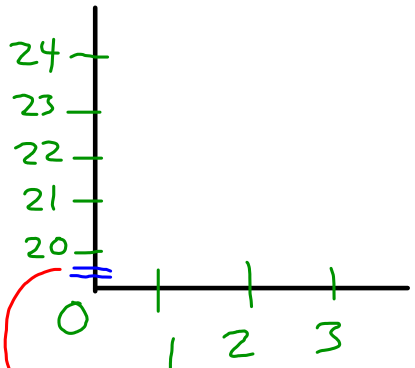
Hourly paid job.

X hours	1	2	3	4	5	Rule
Y $	7.50	15	22.5	30	37.5	?

Rule? $(x) ? = Y$ $x \cdot 7.5 = y$ What do you do to x to get Y

Graphing must have title, labels & numbers (scale) on the x and y, neat and accurate.





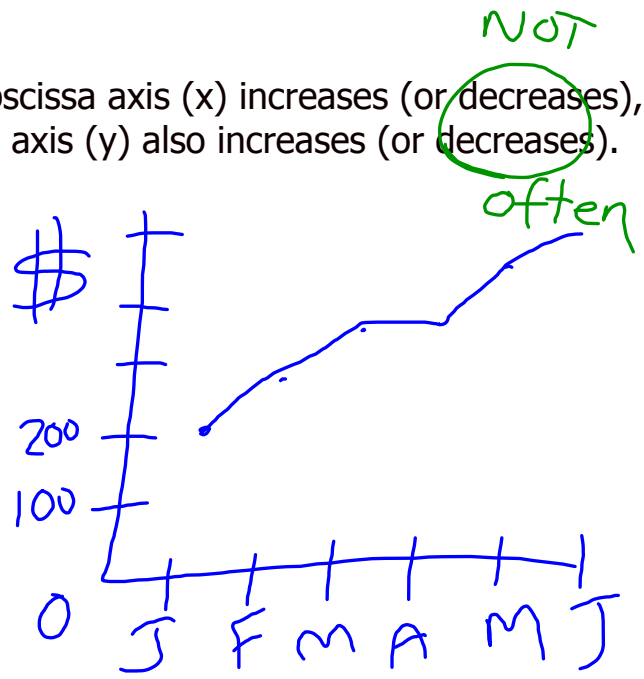
A graph often helps illustrate the relationship between two variables that, for example, can vary in the same or opposite direction.

Variation in the Same Direction

When the value of the variable on the abscissa axis (x) increases (or decreases), the value of the variable on the ordinate axis (y) also increases (or decreases).

Ex.: Monthly fundraising for SPCA

Variables? months, funds collected

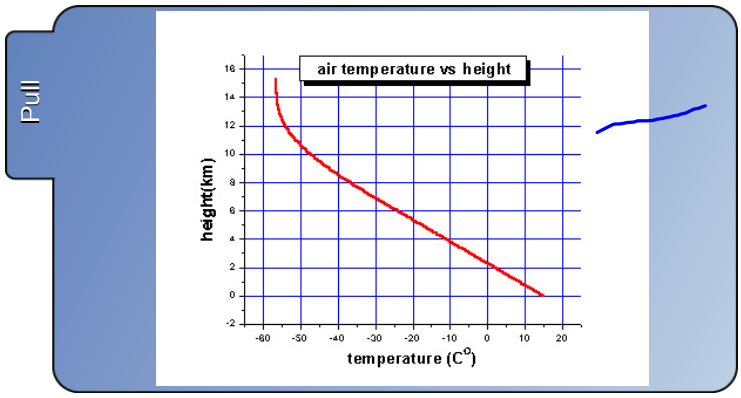


Variation in the Opposite Direction

When the value of the variable on the abscissa axis increases (or decreases), the value of the variable on the ordinate axis decreases (or increases).

Ex.: On a mountain, as the altitude increases, the temperature decreases.

Variables?



Minimum and Maximum Values

In most situations, it is possible to determine the smallest value (called the "minimum value") and the greatest value (called the "maximum value") of the variable on the ordinate axis.