

Using the X and Y axis with DATA!!!

There are many other names that people use to refer to the x and y axis. List any that you know...

x-axis
x-values
input
independent
Domain

y-axis
y-values
output
dependent
Range

When looking at a set of data that you want to graph, how do you decide which variable goes on the x axis and which goes on the y-axis?

Independent \rightarrow x

Dependent \rightarrow y

Example:

Your boss has asked you to make a graph that helps him calculate how much money he owes you based upon the amount of hours you work. What are the two variables to be graphed here?

1. # of hrs worked 2. Total \$ made

Which goes on the x axis? # of hours

Which goes on the y axis? Total \$ made

Domain and Range

Domain and range are words that also refer to the x and y variable in a situation.

Define Domain: All the x-values of the function.

Define Range: All the y-values of the function.

Example: Referring back the example above, tell what the domain and range would be.

Domain: # of hrs

Range: Total \$ made

Now Try These....

1. You are working on a school fund raiser involving t-shirt sales. You are asked to post a graph to illustrate the number of t-shirts that have been sold and the amount of money that has been made.

Domain: # of t-shirts Range: \$ Made

2. The student council is sponsored a dance last month. You were asked to create a graph to illustrate the amount of money that was made and the number of students that attended the dance. You are going to be using this graph to report out at the meeting.

Domain: # of students Range: \$ Made

3. You babysit for your neighbors and get paid hourly.

Domain: # of hrs Range: \$ Made

4. You work at the local library and were assigned a task to keep track of the number of people that visit the library each hour. You need to create a graph to illustrate your findings.

Domain: # of hrs Range: # of people