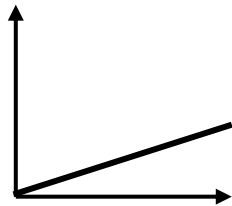


1. The table of data below was produced by students who did a leaking-faucet experiment. The measuring container they used held only 100 milliliters. Identify the independent and dependent variable and interpret the relationship.

Time (seconds)	10	20	30	40	50	60	70
Water Volume (ml)	2	5.5	9	12.5	16	19.5	23

2. Think of two variables whose relationship can be represented by a straight-line graph like the one below. Add labels for the variables you chose.



3. Make up a question about your variables that could be answered using the graph.

You and your family decide to drive to the Grand Canyon. You all take a van that averages a steady 60 miles per hour on the highway. The table below shows the relationship between the time the van travels and the distance.

4. Complete the table.

Time (hours)	0.5	1.0	1.5	2.0	2.5	3.0	3.5
Distance (miles)	30	60					

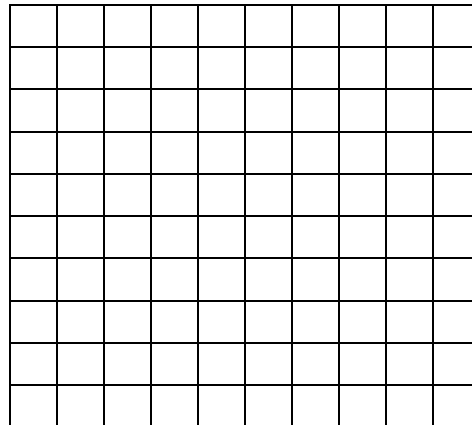
5. Identify the independent and dependent variables. Then write a rule that describes the relationship between distance and time.

Introduction to Functions - Day 3  
Assignment

Name \_\_\_\_\_

Date \_\_\_\_\_ Period \_\_\_\_\_

6. Make a coordinate graph of the data in the table. Be sure to label the axes.



7. Predict the distance traveled in 8 hours.
8. Predict the time needed to travel 300 miles.

Name the type of correlation you would expect from each pair of variables below. Justify your answer in a complete sentence. Also, if applicable, identify the independent and dependent variable for the situation.

9. *Your ability to play a musical instrument and the amount of time you practice.*

Type of Correlation \_\_\_\_\_ Justification \_\_\_\_\_

Independent Variable \_\_\_\_\_ Dependent Variable \_\_\_\_\_

10. *Your beauty and the amount of sleep you get each night.*

Type of Correlation \_\_\_\_\_ Justification \_\_\_\_\_

Independent Variable \_\_\_\_\_ Dependent Variable \_\_\_\_\_