1. Identify the type of relationship (positive, negative or none) you would expect between the two variables.
   a. age of the automobile and the odometer reading
   b. time spent fishing and the amount of bait in the bucket
   c. number of passengers in a car and the number of traffic lights on the route

2. The scatterplot shows the numbers of lawns mowed by a local lawn care business during one week.
   a. The independent variable is ________________________________.
   b. The dependent variable is ________________________________.
   c. How many days does it take to mow 30 lawns?
   d. About how many lawns can be mowed in 1 day?
   e. The relationship between the data is: (Circle the correct word in each pair.)
      Positive    Negative
      Linear      Nonlinear

3. Describe the relationship in each scatterplot. Identify any outliers or clusters.
   a. [Family Size and Laundry Loads]
   b. [Monitor Size and Price]
4. The table shows the number of students remaining on an after school bus and the number of minutes since leaving the school.

<table>
<thead>
<tr>
<th>Number of Students</th>
<th>Minutes</th>
</tr>
</thead>
<tbody>
<tr>
<td>56</td>
<td>0</td>
</tr>
<tr>
<td>45</td>
<td>5</td>
</tr>
<tr>
<td>39</td>
<td>9</td>
</tr>
<tr>
<td>24</td>
<td>15</td>
</tr>
<tr>
<td>17</td>
<td>23</td>
</tr>
<tr>
<td>6</td>
<td>28</td>
</tr>
<tr>
<td>0</td>
<td>32</td>
</tr>
</tbody>
</table>

a. The independent variable is __________________________.

b. The dependent variable is __________________________.

c. Create a scatterplot of this data.

d. Describe the relationship between the two data sets.

e. What tends to happen to the number of students as the minutes increase?

f. Predict the number of students on the bus after 12 minutes.

g. Would 42 students on the bus at 20 minutes be considered an outlier? Why or why not?

5. The scatterplot shows the number of yard sales in a neighborhood each month for a year.

a. How many yard sales are during the month of February? June? October?

b. During which month(s) are there no yard sales?

c. What type of relationship do the data show for months 5-8? Positive Negative Linear Nonlinear

d. What type of relationship do that data show for months 9-12? Positive Negative Linear Nonlinear