State if there appears to be a positive correlation, negative correlation, or no correlation. When there is a correlation, identify the relationship as linear or nonlinear.

1) State if there appears to be a correlation. Identify the relationship as linear or nonlinear.

2) State if there appears to be a correlation. Identify the relationship as linear or nonlinear.

3) State if there appears to be a correlation. Identify the relationship as linear or nonlinear.

4) State if there appears to be a correlation. Identify the relationship as linear or nonlinear.

5) State if there appears to be a correlation. Identify the relationship as linear or nonlinear.

6) State if there appears to be a correlation. Identify the relationship as linear or nonlinear.
Construct a scatter plot.

7) Construct a scatter plot.

<table>
<thead>
<tr>
<th>X</th>
<th>Y</th>
<th>X</th>
<th>Y</th>
</tr>
</thead>
<tbody>
<tr>
<td>300</td>
<td>1</td>
<td>1,800</td>
<td>3</td>
</tr>
<tr>
<td>800</td>
<td>1</td>
<td>3,400</td>
<td>3</td>
</tr>
<tr>
<td>1,100</td>
<td>2</td>
<td>4,700</td>
<td>4</td>
</tr>
<tr>
<td>1,600</td>
<td>2</td>
<td>6,000</td>
<td>4</td>
</tr>
<tr>
<td>1,700</td>
<td>2</td>
<td>8,500</td>
<td>6</td>
</tr>
</tbody>
</table>

Construct a scatter plot. Find the slope-intercept form of the equation of the line that best fits the data.

8) Construct a scatter plot.

<table>
<thead>
<tr>
<th>X</th>
<th>Y</th>
<th>X</th>
<th>Y</th>
<th>X</th>
<th>Y</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.1</td>
<td>7.5</td>
<td>0.4</td>
<td>3.3</td>
<td>0.6</td>
<td>1.8</td>
</tr>
<tr>
<td>0.1</td>
<td>7.6</td>
<td>0.6</td>
<td>1.4</td>
<td>0.9</td>
<td>1.5</td>
</tr>
<tr>
<td>0.3</td>
<td>4.5</td>
<td>0.6</td>
<td>1.7</td>
<td>1</td>
<td>1.7</td>
</tr>
<tr>
<td>0.4</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

9) Construct a scatter plot.

<table>
<thead>
<tr>
<th>X</th>
<th>Y</th>
<th>X</th>
<th>Y</th>
<th>X</th>
<th>Y</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>700</td>
<td>40</td>
<td>300</td>
<td>7</td>
<td>100</td>
</tr>
<tr>
<td>10</td>
<td>800</td>
<td>60</td>
<td>200</td>
<td>8</td>
<td>100</td>
</tr>
<tr>
<td>30</td>
<td>400</td>
<td>70</td>
<td>100</td>
<td>100</td>
<td>200</td>
</tr>
<tr>
<td>30</td>
<td>500</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

10) Construct a scatter plot.

<table>
<thead>
<tr>
<th>X</th>
<th>Y</th>
<th>X</th>
<th>Y</th>
<th>X</th>
<th>Y</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>20</td>
<td>5</td>
<td>70</td>
<td>7</td>
<td>80</td>
</tr>
<tr>
<td>2</td>
<td>40</td>
<td>6</td>
<td>80</td>
<td>9</td>
<td>80</td>
</tr>
<tr>
<td>3</td>
<td>50</td>
<td>7</td>
<td>80</td>
<td>10</td>
<td>80</td>
</tr>
<tr>
<td>4</td>
<td>60</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
State if there appears to be a positive correlation, negative correlation, or no correlation. When there is a correlation, identify the relationship as linear or nonlinear.

1) Positive correlation  
Nonlinear

2) No correlation

3) Positive correlation  
Linear

4) Negative correlation  
Linear

5) Negative correlation  
Nonlinear

6) No correlation
Construct a scatter plot.

7) \[
\begin{array}{cc}
X & Y \\
300 & 1 \\
800 & 1 \\
1,100 & 2 \\
1,600 & 2 \\
1,700 & 2 \\
\end{array}
\quad \begin{array}{cc}
X & Y \\
1,800 & 3 \\
3,400 & 3 \\
4,700 & 4 \\
6,000 & 4 \\
8,500 & 6 \\
\end{array}
\]

Construct a scatter plot. Find the slope-intercept form of the equation of the line that best fits the data.

8) \[
\begin{array}{ccc}
X & Y & X & Y \\
0.1 & 7.5 & 0.4 & 3.3 \\
0.1 & 7.6 & 0.6 & 1.4 \\
0.3 & 4.5 & 0.6 & 1.7 \\
0.4 & 3.2 & 0.9 & 1.5 \\
\end{array}
\]

Create your own worksheets like this one with Infinite Pre-Algebra. Free trial available at KutaSoftware.com

\[
y = -7.381x + 709.05
\]

\[
y = 6.4286x + 29.286
\]