Quiz - Scatter plots

1) What type of correlation is shown in the scatter plot below?

A. positive correlation  
B. negative correlation  
C. no correlation

Use the scatter plot to answer questions 2 - 4. The scatter plot shows the study times and test scores for a number of students.

2) What type of correlation is displayed in the scatter plot?
A. weak positive  
B. strong positive  
C. weak negative  
D. strong negative

3) Which of the following statements relating the scatter plot is true?
A. As study time increased, test scores increased.  
B. As study time increased, test scores decreased.  
C. As test scores increased, study time decreased.  
D. Study time showed no effect on test scores.

4) Does the scatter plot relating study time to test scores contain any outliers?
A. yes  
B. no  
C. scatter plots cannot have outliers
Determine whether a scatter plot of the data for the following might show a positive, negative, or no correlation.

5) length of time for a shower and the amount of water used
   A. positive correlation
   B. negative correlation

6) grade in school and number of pets
   A. positive
   B. negative

7) the price of a pizza in dollars and the number of pizza's sold
   A. positive
   B. negative

8) Which graph shows the best trend line for the following data.

<table>
<thead>
<tr>
<th>Practice (weeks)</th>
<th>6</th>
<th>8</th>
<th>10</th>
<th>12</th>
<th>14</th>
<th>16</th>
<th>18</th>
</tr>
</thead>
<tbody>
<tr>
<td>Score</td>
<td>15.5</td>
<td>21.5</td>
<td>26.5</td>
<td>34</td>
<td>33</td>
<td>37</td>
<td>41</td>
</tr>
</tbody>
</table>

   A. 
   B. 
   C. 
   D.

9) The scatter plot below shows the number of students per class at Monida Middle School and the number of magazine subscriptions each class sold for a fund-raiser.
Draw a line of best fit on the scatter plot. About how many subscriptions did the class of 30 students sell?

A. about 185 subscriptions  
B. about 175 subscriptions  
C. about 165 subscriptions  
D. about 195 subscriptions

10) The scatter plot shows the number of CDs that Disc-O CD factory produced in different months. Draw a line of best fit on the scatter plot. What is the best prediction for the month in which they will produce 5,500 CDs?

A. June  
B. September  
C. July  
D. May