Sample Q2

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

Questions 1-5
The following is a set of data from a sample of size n( n=7): 16, 7, 2, 2, 10, 11, -6.

1) Find the mean of the data set
   A) 7  B) 7.28  C) 6  D) 2

2) Find the mode of the data set
   A) 6  B) 2  C) 7  D) 7.28

3) Find the standard deviation of the data set
   A) 53  B) 7.28  C) 6.74  D) 318

4) The five-number summary of the data set consists of __________, __________, __________, __________, and __________.
   A) -6, 1.75, 3.5, 5.25, 16  B) -6, 2, 4, 6, 16  C) -6, 2, 4.5, 11, 16  D) -6, 2, 7, 11, 16

5) What type of shape does the distribution of the sample appear to have?
   A) Right-skewed.  B) Left-skewed.  C) Symmetrical  D) bell-shaped

6) Suppose you believe that the probability that you will get an A in Statistics is 0.5 and the probability that you will get an A in Marketing is 0.8. If these events are independent, what is the probability that you will get an A in both Statistics and Marketing?
   A) 0.40  B) 0.50  C) 0.80  D) 0.90

Questions 7-8: The table below contains the opinions of a sample of 200 people broken down by gender about the latest congressional plan to eliminate anti-trust exemptions for professional baseball.

<table>
<thead>
<tr>
<th>For</th>
<th>Neutral</th>
<th>Against</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>38</td>
<td>54</td>
<td>12</td>
</tr>
<tr>
<td>Male</td>
<td>12</td>
<td>36</td>
<td>48</td>
</tr>
<tr>
<td>Totals</td>
<td>50</td>
<td>90</td>
<td>60</td>
</tr>
</tbody>
</table>

7) Referring to the table, what proportion of the opinions involved Female or Neutral?
   A) 54  B) 194/200
   C) 54/200  D) 140/200

8) Referring to the table, given that the person is a Female, what proportion of the opinions involved Neutral?
   A) 54/90  B) 90/104  C) 54/104  D) 54/200

9) According to the empirical rule, if the data form a "bell-shaped" normal distribution, _________ percent of the observations will be contained within 1 standard deviations around the mean.
   A) 68.26  B) 83.75  C) 99.70  D) 95.44
MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

1) C
2) B
3) B
4) D
5) B
6) A
7) D
8) C
9) A