**QUESTION 1**

1. Randomly selected 50 people from New York City were asked   
   if they use a subway to get to the work place. 40 said "Yes".   
   Based on this sample data was made a statement that 80%   
   of the whole population of New York City take subway to get to the work place.   
   Does this statement represent descriptive or inferential statistics?

|  |  |  |
| --- | --- | --- |
|  |  | descriptive |
|  |  | inferential |

**1 points**

**QUESTION 2**

1. Table below shows example of frequency and relative-frequency distribution.

|  |  |  |
| --- | --- | --- |
| Interval | Frequency | Relative frequency |
| 22-29 | 4 | 0.16 |
| 30-39 | 6 | 0.24 |
| 40-49 | **?** | 0.40 |
| 50-59 | 5 | 0.20 |
| Total |  | 1.00 |

1. Find missing frequency for interval 40-49.

|  |  |  |
| --- | --- | --- |
|  |  | 8 |
|  |  | 10 |
|  |  | 12 |
|  |  | 15 |

**1 points**

**QUESTION 3**

1. A sample of democratic voters were asked if they voted   
   in the primary election for Hillary (H), Sanders (S) or none above (N).  
   Here is the result of this poll:  
     
   H  H  S  S  S  N  N  N  H  N  
   S  H  S  S  N  H  N  H  N  N  
   S  S  S  N  N  N  H  N  N  N  
   N  H  S  S  S  N  N  N  N  N

Based on this sample, what is the relative frequency  
for number of likely democratic voters who will not  
participate in the coming election?

|  |  |  |
| --- | --- | --- |
|  |  | 0.28 |
|  |  | 0.10 |
|  |  | 0.50 |
|  |  | 0.35 |

**1 points**

**QUESTION 4**

1. Find the Median for the following set of data:

11, 22, 5, 7, 30

|  |  |  |
| --- | --- | --- |
|  |  | 5 |
|  |  | 11 |
|  |  | 6 |
|  |  | 15 |

**1 points**

**QUESTION 5**

1. Find the Median for the following set of data:

25, 20, 8, 10, 28, 16, 22, 15

|  |  |  |
| --- | --- | --- |
|  |  | 22 |
|  |  | 19 |
|  |  | 18 |
|  |  | 25 |

**1 points**

**QUESTION 6**

1. Calculate Weighted Mean for the following Data:

|  |  |  |
| --- | --- | --- |
| Value | Weight | |
| 20 | 2 | |
| 25 | 4 | |
| 32 | 4 | |
| 40 | 2 | |
|  |  | 29 |
|  |  | 28 |
|  |  | 26 |
|  |  | 30 |

**1 points**

**QUESTION 7**

1. What data collection represents this Steam-and-Leaf Diagram?

|  |  |
| --- | --- |
| Stems | Leaves |
| 2 | 1, 4 |
| 3 | 2, 5 |
| 4 | 0, 3 |
| 5 | 6, 8 |

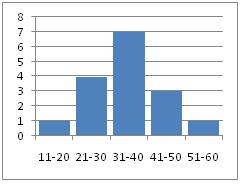


|  |  |  |
| --- | --- | --- |
|  |  | 1, 4, 2, 5, 0, 3, 6, 8 |
|  |  | 2, 1, 4, 3, 2, 5, 4, 0, 3, 5, 6, 8 |
|  |  | 12, 42, 23, 53, 04, 34, 65, 85 |
|  |  | 21, 24, 32, 35, 40, 43, 56, 58 |

**1 points**

**QUESTION 8**

1. Based on this Histogram, what percentage of data are below 41?



If you don't see a Histogram, [click here](https://my.berkeleycollege.edu/bbcswebdav/pid-8686569-dt-content-rid-94366906_1/xid-94366906_1)

|  |  |  |
| --- | --- | --- |
|  |  | 40% |
|  |  | 50% |
|  |  | 65% |
|  |  | 75% |

**1 points**

**QUESTION 9**

1. Calculate **sample variance** for the following data collection:  
     10, 25, 28, 35  
   (when you calculate variance, divide by N-1 not by N).

|  |  |  |
| --- | --- | --- |
|  |  | 85 |
|  |  | 111 |
|  |  | 150 |
|  |  | 180 |

**1 points**

**QUESTION 10**

1. Calculate **sample standard deviation** for the following data collection:

22, 24, 28, 31, 35

(use formula for sample, not for population:  
when you calculate variance divide by N-1 not by N).

|  |  |  |
| --- | --- | --- |
|  |  | 5.2 |
|  |  | 6.4 |
|  |  | 7.1 |
|  |  | 8.0 |