Measures of center and variation

Name_____

Date_____

**Find the mode, median, mean, range, lower quartile, and upper quartile for each data set.**
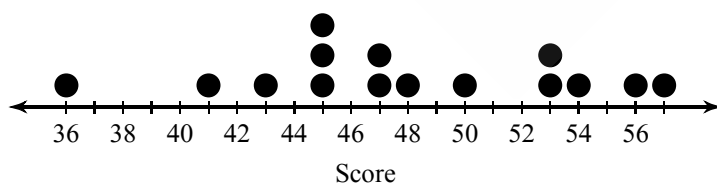
1) Academy Awards Won by Movie

| # Awards | Frequency |
|----------|-----------|
| 2 | 2 |
| 3 | 2 |
| 4 | 2 |
| 5 | 5 |
| 6 | 2 |
| 7 | 1 |
| 9 | 1 |
| 11 | 1 |

2)      Mens Heights (Inches)

| | | | | | | |
|---|---|---|---|---|---|---|
| 76 | 72 | 65 | 70 | 69 | 69 | 65 |
| 69 | 67 | 76 | 75 | 72 | 59 | 67 |
| 64 | 73 | 72 | | | | |

3)      Test Scores



Score

www.mrtownsend.com

4)  Goals in a Hockey Game

| Goals | Frequency |
|-------|-----------|
| 3 | 3 |
| 4 | 2 |
| 5 | 1 |
| 7 | 6 |
| 8 | 1 |
| 9 | 2 |
| 11 | 1 |

5)      Games per World Series

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 7 | 7 | 7 | 7 | 7 | 7 | 4 | 4 |
| 6 | 5 | 4 | 6 | 6 | 6 | 7 | 7 |
| 6 | | | | | | | |

6)  Annual Precipitation (Inches)

| Stem | Leaf |
|------|------|
| 1 | 5 7 |
| 2 | |
| 3 | 5 9 9 |
| 4 | 5 7 9 |
| 5 | 1 3 4 9 |
| 6 | 5 7 7 9 |

Key: 4|5 = 45

7)      Age at First Job

| | | | | | | |
|---|---|---|---|---|---|---|
| 16 | 13 | 15 | 18 | 17 | 20 | 15 |
| 18 | 21 | 13 | 17 | 12 | 16 | 14 |
| 16 | | | | | | |

8)    Sales Tax by State



0 1 2 3 4 5 6 7
Percent
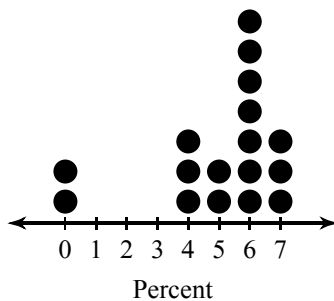
# Answers to

1) Mode = 5, Median = 5,
   Mean = 5.13, Range = 9,
   $Q_1$ = 3.5 and $Q_3$ = 6

2) Mode = 69 and 72, Median = 69,
   Mean = 69.41, Range = 17, $Q_1$ = 66
   and $Q_3$ = 72.5

3) Mode = 45, Median = 47, Mean = 48, Range = 21,
   $Q_1$ = 45 and $Q_3$ = 53

4) Mode = 7, Median = 7,
   Mean = 6.31, Range = 8, $Q_1$ = 4
   and $Q_3$ = 7.5

5) Mode = 7, Median = 6,
   Mean = 6.06, Range = 3, $Q_1$ = 5.5
   and $Q_3$ = 7

6) Mode = 39 and 67, Median = 50,
   Mean = 48.19, Range = 54,
   $Q_1$ = 39 and $Q_3$ = 62

7) Mode = 16, Median = 16,
   Mean = 16.07, Range = 9, $Q_1$ = 14 and
   $Q_3$ = 18

8) Mode = 6, Median = 6,
   Mean = 5, Range = 7, $Q_1$ = 4 and
   $Q_3$ = 6