## The Mean, Median, Mode and Midrange

Find the measures of central tendency for the following sets of data.

1. $82,78,56,70$
2. $21,13,18,27,30,12$
3. $78,60,64,72,60$
4. $10,8,2,9,6,4,8$
5. 

| Hours | Frequency |
| :--- | :--- |
| 2 | 4 |
| 4 | 8 |
| 5 | 6 |
| 8 | 11 |
| 12 | 14 |
| 20 | 8 |
| 24 | 9 |

7. 

| Value | Frequency |
| :--- | :--- |
| 5 | 9 |
| 6 | 4 |
| 7 | 11 |
| 8 | 20 |
| 9 | 5 |


| Days | Frequency |
| :--- | :--- |
| 3 | 4 |
| 4 | 6 |
| 5 | 7 |
| 6 | 15 |
| 7 | 2 |

9. 

| Value | Frequency |
| :--- | :--- |
| 22 | 6 |
| 23 | 8 |
| 24 | 10 |
| 25 | 4 |

10. 

| Value | Frequency |
| :--- | :--- |
| 10 | 4 |
| 11 | 12 |
| 12 | 16 |
| 13 | 8 |
| 14 | 20 |
| 15 | 4 |


| Answers | Mean | Median | Mode | Midrange |
| :---: | :---: | :---: | :---: | :---: |
| 1 | 71.5 | 75 | None | 69 |
| 2 | 20.17 | 19.5 | None | 21 |
| 3 | 66.8 | 64 | 60 | 69 |
| 4 | 6.125 | 7 | $2 \& 8$ | 6 |
| 5 | 11.7 | 12 | 12 | 15 |
| 6 | 7.3 | 10 | 12 | 6 |
| 7 | 5.15 | 5.5 | 6 | 5 |
| 8 | 7.16 | 8 | 8 | 7 |
| 9 | 23.43 | 23.5 | 24 | 23.5 |
| 10 | 12.63 | 12.5 | 14 | 12.5 |

## Mean, Median, Mode Comparison from Graphs

Skewed to the Right:


Mode < Media < Mean
Skewed to the Left


Mean < Median < Mode
Normal Symmetric:


$$
\text { Mean }=\text { Median }=\text { Mode }
$$

