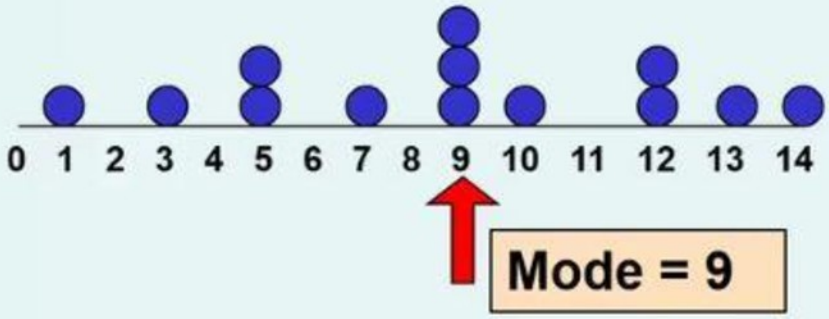
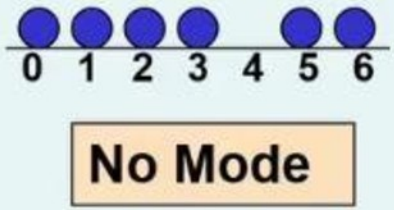
Mode

A statistical measure of central tendency

Measures of Central Tendency: The Mode

- Value that occurs **most often**
- There may be no mode
- There may be several modes





Mode

The most frequently occurring score

Example: 1, 2, 2, 2, 3, 3, 4

Mode = 2

Mode

Example: 1, 2, 2, 3, 3, 4

Bimodal (two modes) = 2, 3

Mode

Example: 1, 2, 2, 3, 3, 4, 4

Multimodal (three or more modes) = 2, 3, 4

Measures of Central Tendency: Review Example

House Prices:

$2,000,000
$500,000
$300,000
$100,000
$100,000
Sum **$3,000,000**

- **Mean:** $3,000,000/5
  = **$600,000**

$$\bar{X} = \frac{\sum_{i=1}^{n} X_i}{n}$$

- **Median:** middle value of ranked data

$$\frac{n+1}{2}$$

  (5+1)/2 = 3rd position
  = **$300,000**

- **Mode:** most frequent value
  = **$100,000**

Measures of Central Tendency: Review Example

House Prices:

$2,000,000
$500,000
$300,000
$150,000
$130,000
$120,000
Sum **$3,200,000**

- **Mean:** $3,200,000/6
  = **$533,333.33**

$$\bar{X} = \frac{\sum_{i=1}^{n} X_i}{n}$$

- **Median:** middle value of ranked data

$$\frac{n+1}{2}$$

(6+1)/2 = 3.5 position

= **($300,000 + $150,000)/2**

= **$225,000**

- **Mode:** most frequent value
  = **N/A**