

# CALCULATION OF THE INTERQUARTILE RANGE

- 1 Order observations from least to most.
- 2 To determine how far to penetrate the set of ordered observations, beginning at either end, add 1 to the total number of observations and divide by 4. If necessary, round the result to the nearest whole number.
- 3 Beginning with the largest observation, count the requisite number of steps into the ordered observations to find the location of the third quartile.
- 4 The third quartile equals the value of the observation **at this location**
- 5 Beginning with the smallest observation, again count the requisite number of steps into the ordered observations to find the location of the first quartile
- 6 The first quartile equals the value of the observation **at this location**.
- 7 The interquartile range equals the third quartile minus the first quartile

1 8, 9, 9, 10, 11, 11, 12

2  $7 + 1/4 = 2$

3 8, 9, 9, 10, 11, 11, 12

4 third quartile = 11

5 8, 9, 9, 10, 11, 11, 12

6 first quartile = 9

7 interquartile range =  $11 - 9 = 2$