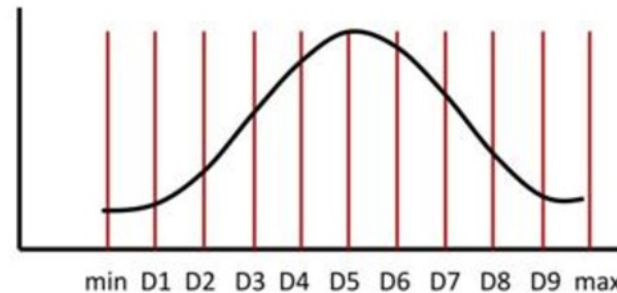Decile

Percentile

Dispersion Measures: Percentiles and Deciles

- **Percentiles**: Of a distribution are the 99 values that split the data into a hundred equal parts

min D1 D2 D3 D4 D5 D6 D7 D8 D9 max

- **Deciles**: Of a distribution are the 9 values that split the data into 10 equal parts

1   5 10   20 30 40 50 60 70 80   90 95   98 99

Percentile Scores

- **Quartiles** of a distribution are the 3 values that split the data into 4 equal parts
  - Median (or second quartile) divides the data into a lower and upper half
  - First quartile is the middle of the lower half (25%)
  - Third quartile is the middle of the upper half (75%)

- The **inter-quartile range (IQR)** is a measure that indicates the extent to which the central 50% of values within the dataset are dispersed
  IQR = Q3 – Q1
  - Ignores outliers
  - Only two points used in estimation