

## Percentiles and quartiles

Percentage { 1,2,3,4,5,6 }

# Number of odd numbers = 3

Percentage of odd numbers in =  $(3 / 6) * 100 = 50 \%$  this group

Percentiles: A percentile is a value below which certain percentage of observations lie.

{2, 2, 3, 4, 5, 6, 7, 8, 8, 9, 9, 10}  $x = 9$

Percentail of value X =  $\frac{\# \text{ of values below } X}{n} \times 100$

$$= \frac{11}{14} \times 100 = 78.57\% \text{ at value 9}$$

Percentile Ranking

$$\Rightarrow \text{Value} = \frac{\text{Percentile}}{100} \times (n+1)$$

$$\frac{25}{100} \times (14+1) = \frac{15}{4} = 3.75\%$$

## 2) Quartiles

