

How to find outliers?

① IQR Method.

This is used when data is not normal.

$$\text{Lower Limit} = Q_1 - 1.5 \times \text{IQR}$$

$$\text{Upper Limit} = Q_3 + 1.5 \times \text{IQR}$$

The values $<$ lower limit and values $>$ upper limit are called as outliers.

$$\text{value} \notin [Q_1 - 1.5 \times \text{IQR}, Q_3 + 1.5 \times \text{IQR}]$$

② 3-Sigma Rule

This method is used when data is normal.

$$\text{Lower Limit} = \mu - 3\sigma$$

$$\text{Upper Limit} = \mu + 3\sigma$$

$$\text{value} \notin [\mu - 3\sigma, \mu + 3\sigma]$$

Note:-

- * Handle outliers only if percentage of outliers is less than 5%.
- * If it's above 5%, don't do anything.