## Skewness and Kurthosis

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## 1 Skewness

Skewness is the standardised third moment. It is a measure of asymmetry of the probability distribution. It is defined as follows

$$\gamma_1 = E\left[ \left( \frac{X - \mu}{\sigma} \right)^3 \right]$$

## 2 Kurtosis

Kurtosis is the standardised fourth moment. It is a measure that describes the shape of the distributions tail in relation to its overall shape. It is defined as follows

$$\gamma_1 = E\left[ \left( \frac{X - \mu}{\sigma} \right)^4 \right]$$

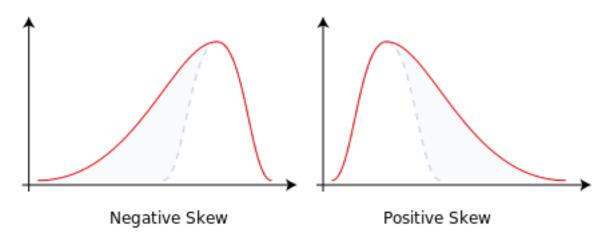


Figure 1: source:wiki