Measures of dispersion:

[2, 4, 6, 8, 10]

$$\text{mean} = \frac{2+4+6+8+10}{5} = 6$$

$$\text{variance} = \sigma^2 = \frac{\Sigma(x-\bar{x})^2}{N}$$

$$= \frac{(2-6)^2 + (4-6)^2 + (6-6)^2 + (8-6)^2 + (10-6)^2}{5}$$

$$= \frac{(-4)^2 + (-2)^2 + 0 + 2^2 + 4^2}{5} = \frac{16+4+4+16}{5}$$

$$= \frac{40}{5} = 8$$

$$\text{Standard deviation } \sigma = \sqrt{\sigma^2}$$

$$= \sqrt{8} = 2.828$$

Here, the spread of data (variance) is 8 and the distance of points from the mean (stdv) is 2.828