

Credit

Standard Deviation

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x	x ²
2	4
5	25
3	9
5	25
<hr/>	<hr/>
$\Sigma x = 15$	$\Sigma x^2 = 63$
$(\Sigma x)^2 = 225$	

$$S_{dev} = \sqrt{\frac{63 - \frac{225}{4}}{3}} = 1.8$$

Note

$$mean = \frac{\Sigma x}{n} = \frac{15}{4} = 3.75$$

Standard Deviation
"a measure of spread only"

S = standard deviation
n = number of data points
 $(\Sigma x)^2$ = Sum of data squared
 Σx^2 = Sum of squared data

$$S_{dev} = \sqrt{\frac{\Sigma x^2 - \frac{(\Sigma x)^2}{n}}{n-1}}$$