

eg. nos 2, 5, 6, 7 $\sigma = ?$

$$\text{mean} = \bar{X} = \frac{2+5+6+7}{4} = 5$$

$$n = 4$$

X	\bar{X}	$X - \bar{X}$	$(X - \bar{X})^2$
2	5	-3	9
5	5	0	0
6	5	1	1
7	5	2	4
$\Sigma(X - \bar{X})^2$			14

$$\sigma = \sqrt{\frac{\Sigma(X - \bar{X})^2}{n}} = \sqrt{\frac{14}{4}} = 1.9$$

3, 6, 7, 9, 10 $\sigma = ?$

$$\bar{X} = \frac{3+6+7+9+10}{5} = 7$$

$$n = 5$$

X	\bar{X}	$X - \bar{X}$	$(X - \bar{X})^2$
3	7	-4	16
6	7	-1	1
7	7	0	0
9	7	2	4
10	7	3	9
$\Sigma(X - \bar{X})^2$			30

$$\sigma = \sqrt{\frac{\Sigma(X - \bar{X})^2}{n}} = \sqrt{\frac{30}{5}} = \sqrt{6} \approx 2.4$$