

Class A Grades(hypothetical) Practice Problem
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STD-DEV-PRACTICE4.xls

X	X-Mean	(X-Mean)^2
92	17.333	300.444
48	-26.667	711.111
69	-5.667	32.111
68	-6.667	44.444
87	12.333	152.111
74	-0.667	0.444
71	-3.667	13.444
91	16.333	266.778
72	-2.667	7.111

SUMS	672
MEAN	74.667
COUNT	9

0.000	Variation(SS)	1528.000
A	SamDesMS	169.778
B	SamDesSTD	13.030
C	Infer~MS	191.000
D	Infer~STD	13.820

Definitional Formula, Descriptive Statistic,
Sample Variance

Definitional Formula, Descriptive Statistic,
Sample Standard Deviation

A

$$S^2 = \frac{\sum(X - \bar{X})^2}{n}$$

$$S = \sqrt{\frac{\sum(X - \bar{X})^2}{n}}$$

B

C

$$s^2 = \frac{\sum(X - \bar{X})^2}{n-1}$$

$$s = \sqrt{\frac{\sum(X - \bar{X})^2}{n-1}}$$

D

Definitional formula, Inferential Statistic,
estimate of Population Variance from
Sample Data.

Definitional formula, Inferential Statistic,
estimate of Population Standard Deviation
from Sample Data.