Class A Grades(hypothetical) **first_demo1a.xls** Statistics Exam 1
Dr. A. A. Walsh 10/6/2005 13:45

| | | X | | X-Mean | | | (X-Mean)^2 |
|---|---|---|---|---|---|---|---|
| | | 6 | | 0.200 | | | 0.040 |
| | | 4 | | -1.800 | | | 3.240 |
| | | 3 | | -2.800 | | | 7.840 |
| | | 8 | | 2.200 | | | 4.840 |
| | | 8 | | 2.200 | | | 4.840 |
| SUMS | | 29 | | 0.000 | | Variation(SS) | 20.800 |
| | | | | | | | |
| MEAN | | 5.800 | | | A | SamDesMS | 4.160 |
| COUNT | | 5 | | | B | SamDesSTD | 2.040 |
| | | | | | | | |
| | | | | | C | Infer~MS | 5.200 |
| | | | | | D | Infer~STD | 2.280 |

Definitional Formula, Descriptive Statistic, Sample Variance

**A**

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

Definitional Formula, Descriptive Statistic, Sample Standard Deviation

**B**

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

**C**

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

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

**D**

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

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