Name _____ date _____ period _____ Intro to BMAN 1110

Define the following words and give the abbreviation and equation where applicable.

Population

Sample

Median

Mean

Deviation

Total squared deviation

Variance

Standard deviation (SD)

Coefficient of variation (CV) or Coefficient of Variance

Net weight

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Questions and Problems

1. Ten Vials of enzyme were chosen from a batch for quality control testing.
    a. What was the sample?
    b. What was the population?

2. The glucose level in a blood sample was measured.
    a. What was the sample?
    b. What was the population?

Use Microsoft Excel to calculate the following:

3. Ten measurements of a 10 gram standard weight were made. Calculate the mean, standard deviation, and coefficient of variation. Measurements in grams: 10.001, 10.000, 10.000, 10.002, 10.001, 9.999, 9.999, 10.000, 9.998, 10.001.

4. Calculate the mean, standard deviation, and coefficient of variation for these test percentage scores: 75, 71, 88, 99, 76, 83, 89, 91.

5. Calculate the mean, standard deviation, and coefficient of variation of the class lip balm net weights. If not enough measurements are available for your class data, use the following measurements obtained by another class.

Mass of Full tube	Mass of empty tube	Net Weight
9. 1853	5.1052	
9.2611	6.1415	
9.4717	6.1686	
9.5641	5.1446	
9.6133	5.105	
9.4516	5.1462	
9.3114	5.1426	
9.4908	5.1897	
9.4505	5.1749	
9.4897	5.1776	
9.1427	5.1765	
9.5600	5.2002	
8.911	5.1503	
9.7843	5.1757	
9.4908	5.1745	
9.4516	5.1440	
9.3114	5.1789	
10.3955	5.1310	
9.6375	5.1560	
9.7948	5.1510	
9.6672	5.2000	
9.6359	5.1539	
9.6269	5.1680	