

MAT 1272 classwork 5 – Standard Deviation Worksheet

Data Set #1

Mean: $\bar{x} =$ _____

x	$x - \bar{x}$	$(x - \bar{x})^2$
79		
79		
80		
80		
80		
80		
81		
81		
	Total	

$n =$ _____

Population standard deviation:

$$\text{variance} = \frac{\text{total}}{n} = \sigma^2 = \text{_____}$$

$$\text{standard deviation} = \sqrt{\sigma^2} = \sigma = \text{_____}$$

Sample standard deviation:

$$\text{variance} = \frac{\text{total}}{n-1} = s^2 = \text{_____}$$

$$\text{standard deviation} = \sqrt{s^2} = s = \text{_____}$$

Data Set #2

Mean: $\bar{x} =$ _____

x	$x - \bar{x}$	$(x - \bar{x})^2$
70		
70		
70		
70		
90		
90		
90		
90		
	Total	

$n =$ _____

Population standard deviation:

$$\text{variance} = \frac{\text{total}}{n} = \sigma^2 = \text{_____}$$

$$\text{standard deviation} = \sqrt{\sigma^2} = \sigma = \text{_____}$$

Sample standard deviation:

$$\text{variance} = \frac{\text{total}}{n-1} = s^2 = \text{_____}$$

$$\text{standard deviation} = \sqrt{s^2} = s = \text{_____}$$

Data Set #3

Sample data: 54, 65, 68, 76, 77, 83, 90, 92, 95, 100 mean: $\bar{x} =$ _____

standard deviation: $s =$ _____ variance: $s^2 =$ _____