

Note: Show all work and carry calculations to 4 decimal digits.

1) Consider the following 6 member *population*:

12 13 14 15 18 21

a) Compute the *population* mean, $\mu =$ _____

b) Complete the following worksheet:

X	X- μ	(X- μ) ²	X ²
12			
13			
14			
15			
18			
21			
totals			

c) What is the total deviation from the mean? _____

d) Compute the variance using the *deviations* formula

e) Compute the variance using the *computational* formula

f) Compute the standard deviation.

2) The graphic below shows how US wine consumption has risen between 1960 and 2004. What was the average annual percentage rate of change in US wine consumption over these years?

