

**Question 1**

1. The following data represent the number of hours per week that a sample of 20 students spend studying for a final exam. The data are: 12, 15, 18, 20, 22, 25, 28, 30, 32, 35, 38, 40, 42, 45, 48, 50, 52, 55, 58, 60. Calculate the mean, median, and mode of the data. Also, calculate the range and standard deviation.

Mean =  $\frac{12 + 15 + 18 + 20 + 22 + 25 + 28 + 30 + 32 + 35 + 38 + 40 + 42 + 45 + 48 + 50 + 52 + 55 + 58 + 60}{20}$   
Median = 35  
Mode = 35  
Range = 60 - 12 = 48  
Standard Deviation = 12.5