1.Suppose a normal distribution has u =1.4,and o =0.2, calculate the z –score f or x= 3.5

2.What is the mode of the data set 23, 44, 22, 23, 23, 44, 23, 55?

3. Give the following data set

50, 40, 33, 37, 60

1. Find the mean, median and mode
2. Find the standard deviation

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | 4. Suppose a normal distribution has  u = 1.5 and o = 0.3  Find the z-score and the associated area under the standard normal curve for the following values of x.    a.       2.3  b.      1.7  c.       2  d.      1.9  e.       2.1  5. A campus club sells 500 raffle tickets at a price of $2 each. The raffle offers one $100 dollar prize, two $50 prizes, and five $25 prizes. What is the expected value of a raffle ticket? (Apply the concepts of Probability Distribution and expected value, as appropriate)  6. Calculate the standard deviation of the following set of scores: 45, 52, 45, 40  7. Determine the probability that a randomly selected data value will fall within 1.67 standard deviations of the mean.   |  | | --- | | Which one? 45.25%,90.5%,85.5%,or30.25% | | Question 10 answers | | |  |  |  |
|  |  |  |  |  |