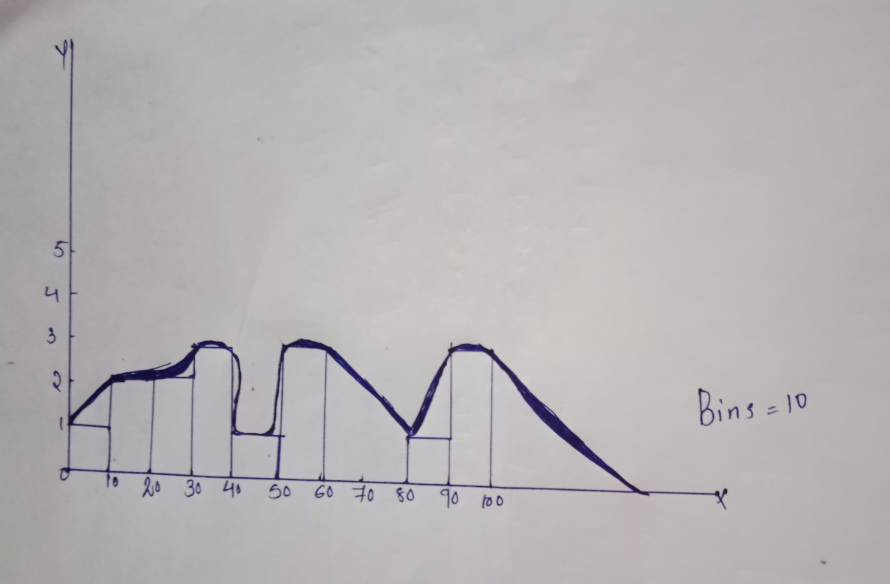
Que 1) Plot a histogram,

10, 13, 18, 22, 27, 32, 38, 40, 45, 51, 56, 57, 88, 90, 92, 94, 99

ANS;



Q.2. What is the value of the 99 percentile?

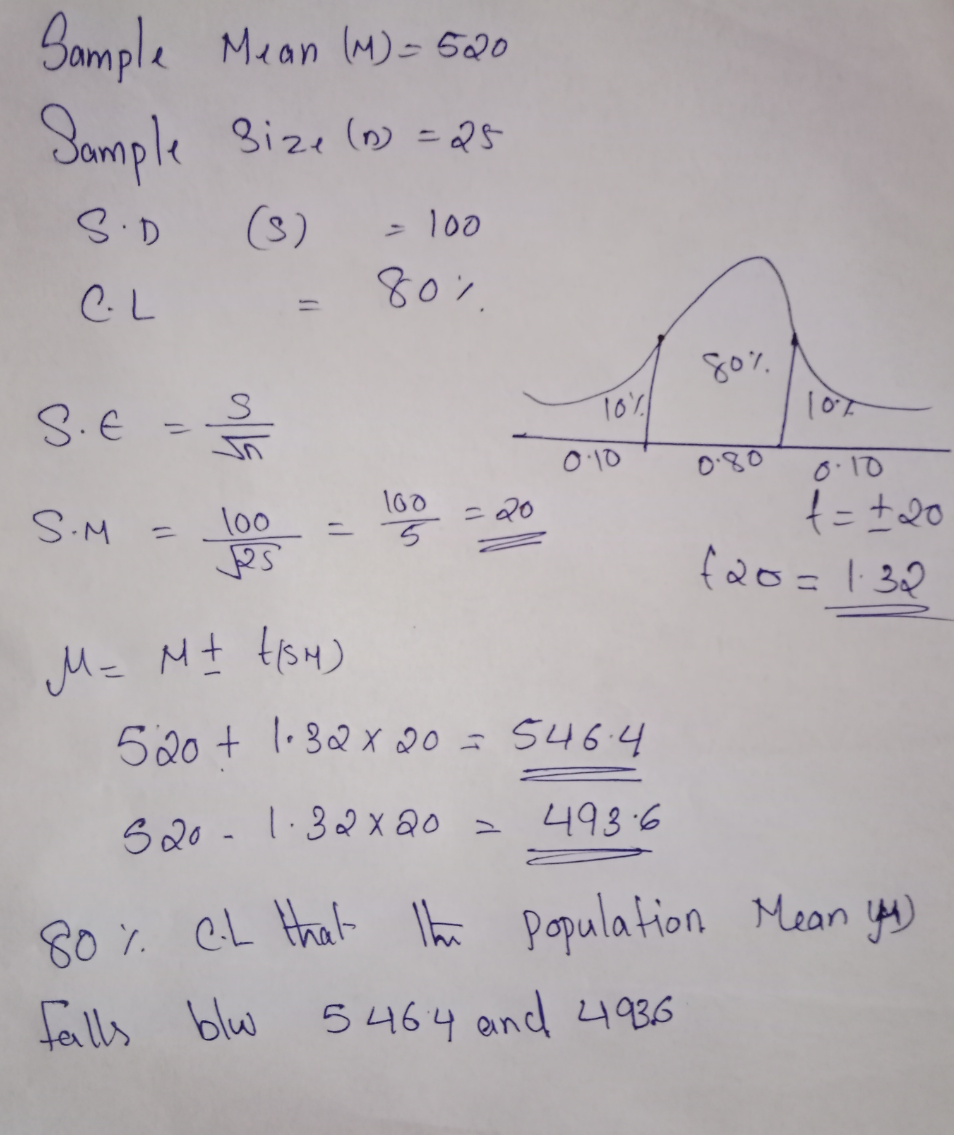
2,2,3,4,5,5,5,6,7,8,8,8,8,8,9,9,10,11,11,12

ANS:-

99/100\*20+1= 20.79 index

The value of the 99 percentile = 12

Que 3) In a quant test of the CAT Exam, the population standard deviation is known to be 100. A sample of 25 tests taken has a mean of 520. Construct an 80% CI about the mean.



Q.4. In left & right-skewed data, what is the relationship between mean, median & mode?

Draw the graph to represent the same.

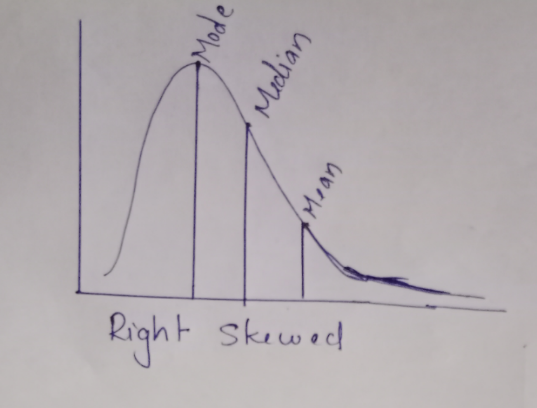
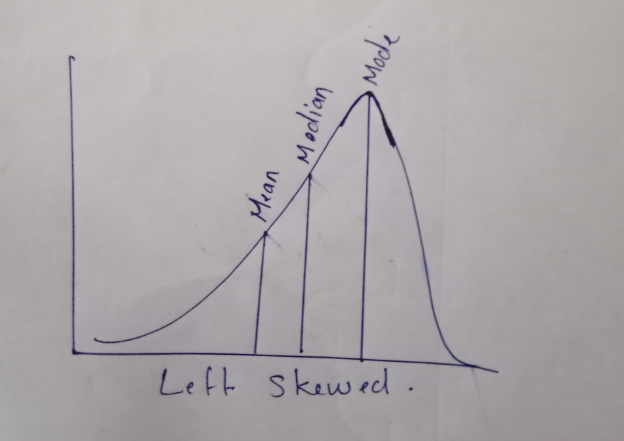
ANS: The relationship between mean, median & mode

Right Skewed Data = Mean>Median>Mode

Left Skewed Data = Mode<Median<Mean

A Right skewed distribution is longer on the right side of its peak than on its left. Right skew is also known as positive skewed

A Left skewed distribution is longer on the left side of its peak than on its Right. Left skew is also known as negative skewed

Que 5) A car believes that the percentage of citizens in city ABC that owns a vehicle is 60% or less. A sales manager disagrees with this. He conducted a hypothesis testing surveying 250 residents & found that 170 residents responded yes to owning a vehicle.

1. State the null & alternate hypothesis.
2. At a 10% significance level, is there enough evidence to support the idea that vehicle owner in ABC city is 60% or less.

ANS

