

Name: -----ID: -----

Q.No.1: Past sales records indicate that sales at the store are normally distributed with a mean 12.5 and variance 156.25. The store manager has selected a random sample of 100 sales receipts.

a). Find the probability of getting a sample mean between 12.25 and 13 from this population.

b). Find the 50<sup>th</sup> percentile of the sampling distribution of sample mean  $\bar{X}$ .

No.2: Past sales records indicate that sales at the store are exponentially distributed with a mean 12.5 and variance 156.25. The store manager has selected a random sample of 100 sales receipts. Find the probability of getting a sample mean between 12.25 and 13 from this population.