Please show all steps, no excel or any other programs

50. Use the following information to construct the confidence intervals specified to estimate µ

* 1. 95% confidence;  = 25, σ2 = 12.25, and n = 60.
  2. 98% confidence;  = 119.6, S2 = 570.7321, and n = 75.
  3. 90% confidence; ∑X = 1814.4, σ2 = 0.948676, and n = 32.

51. A sample of size n = 10 is randomly selected from a normal population with mean µ = 52 and variance σ2 = 22.5. The sample value  is calculated.

* 1. find P( > 55)
  2. find P(50 ≤≤ 60)
  3. find P( ≤ 55)

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