**Chapter 8: Statistical intervals for a single sample**

**Dạng 1: Confidence interval for μ (σ is known)**

**σ population standard deviation**

*100(1-α)% confidence interval for μ is: two-side*

*100(1-α)% upper-confidence bound for µ is: one-side*

*100(1-α)% lower-confidence bound for µ is: one-side*

Z ~ Normal(mean=0, stdev=1)

Z: standard normal

**Dạng 2: Confidence interval for μ (σ is unknown)**

*100(1-α)% confidence interval for µ is:*

*100(1-α)% upper-confidence bound for µ is:*

*100(1-α)% lower-confidence bound for µ is:*

**Dạng 3: Confidence interval for p**

*100(1-α)% confidence interval for p is:*

*100(1-α)% upper-confidence bound for p is:*

*100(1-α)% lower-confidence bound for p is:*

**Dạng 4: *The required sample size that the error estimating not exceed E is:***

**Dạng 5: *The required sample size that the error estimating not exceed E is:***

what sample size

how large a sample

determine the required sample size

e = sampling error/margin of error/