

## 1- PROPORTION Z-INTERVAL

*This test is used to construct a confidence interval for a population proportion ( $p$ ) using a sample proportion ( $\hat{p}$ )*

The Gallup Youth Survey asked a random sample of 439 U.S. teens aged 13 to 17 whether they thought young people should wait to have sex until marriage. Of the sample, 246 said “Yes”.

**Construct and interpret a 95% confidence interval for the proportion of all teens who would say “Yes” to this question.**

**P) IDENTIFY POPULATION PARAMETER:**

**A) VERIFY CONDITIONS REQUIRED FOR TEST:**

a) Random:

b) Normal Sampling Distribution:

c) Independent:

**D) CONSTRUCT INTERVAL**

**a) USE  $t$  DISTRIBUTION TABLE:**

**b) USE CALCULATOR:**

**S) STATE CONCLUSION:**