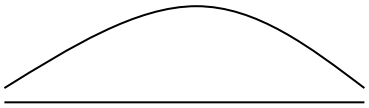
Quiz 14 is about section 12 and 13.

Problem 1.
At $\alpha = .10$, Test that **60%** of stat students pass the course, knowing that in a sample of 400 students only 260 passed the course.

SC: **P** . **H_0 : P**
OC: **P** **H_1 : P**



Critical value = CV = **Z =**

Sample proportion = $\hat{p} = \frac{\quad}{400} =$

Test Statistics $= z = \frac{\hat{p} - p}{\sqrt{\frac{p(1-p)}{n}}} = z = \frac{-}{\sqrt{\frac{\quad}{400}}} =$

Conclusion: Accept or reject **H_0**?

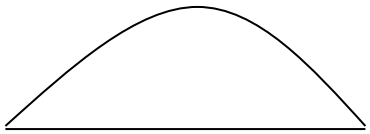
Comment: Accept or reject **SC**?

P-value: than $\alpha = 0.01$ reject **Ho** **TI-83/84** *stat* → *test* → *Option 5*

Problem 2. Marketers believe that 92% of adults own a cell phone. A cell phone manufacturer believes that number is actually lower. In a sample of 200 adults, 87% own a cell phone. At the 1% significance level, determine if the proportion of adults that own a cell phone is lower than the marketers' claim..

SC: **P** **H_0 :**
OC: **P** **H_1 :**

When $\alpha = .010$, n > 30 and one –tailed test then by using bottom row of page **Table 2.**
Critical value = CV = **Z =**



Sample proportion = $\hat{p} = ? =$

Test Statistics $= z = \frac{\hat{p} - p}{\sqrt{\frac{p(1-p)}{n}}} = z = \frac{-}{\sqrt{\frac{\quad}{200}}} = \_\_\_\_\_ =$

Conclusion: Accept or reject **H_0**? Outside CR then **Fail to Reject H_0** or **Accept H_0**

Comment: Accept or reject **SC**? Reject that **more than 85%** of stat students pass the course.

P-value**:** **α =0.01** **Ho**

TI-83/84 *stat* → *test* → *Option 5*