

I. Test H_0 & H_1 when “ σ ” is unknown (p.457):
use t -distribution...

$$1. \text{ } t\text{-score} = \frac{\bar{x} - \mu}{s \div \sqrt{n}}$$

2. estimate P-value w/table (**tricky stuff**)
3. $P\text{-value}(s) \leq \alpha \Rightarrow \text{reject } H_0 \text{ (accept } H_1)$

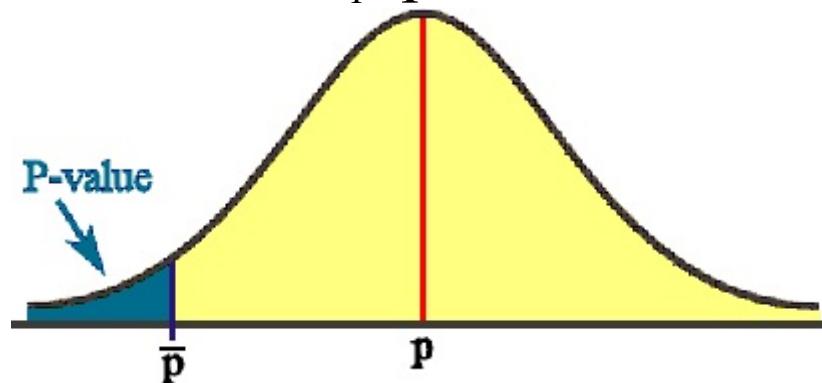
II. Examples (pp.465-467): #10,14,**16,18**

HW: pp.465-467 / #5-13(odd),17
Read pp.470-476 (section 8.3)

I. P-value & Level of Significance (α) –

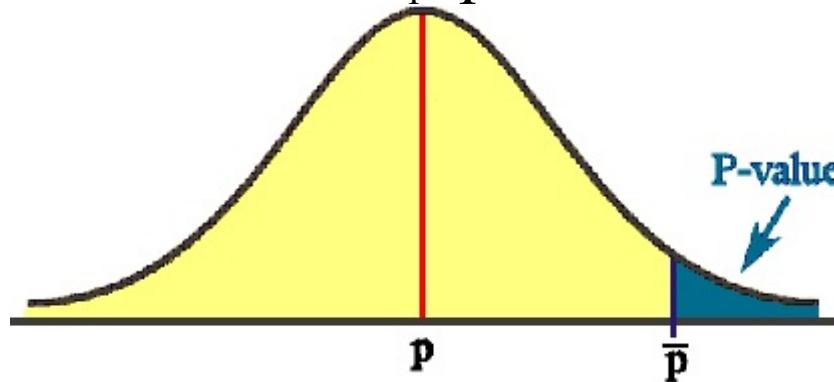
If $H_0: p = k$, then use...

1. Left-tail test for $H_1: p < k$

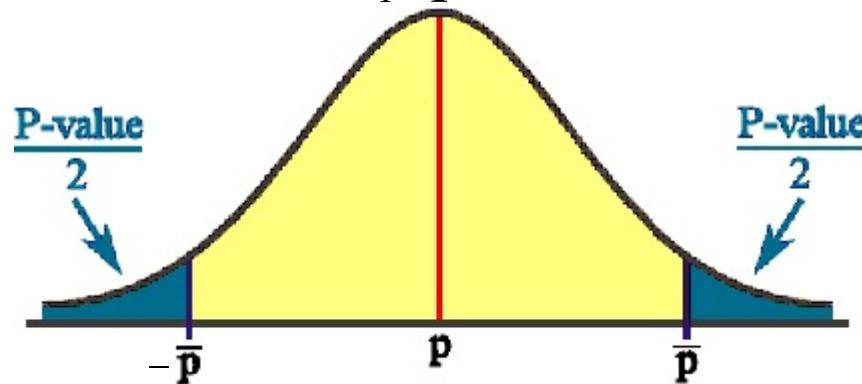


$$P\text{-value} \leq \alpha \Rightarrow \text{reject } H_0$$

2. Right-tail test for $H_1: p > k$



$$P\text{-value} \leq \alpha \Rightarrow \text{reject } H_0$$

I. *continued...*3. Two-tail test for $H_1: p \neq k$ 

$$P\text{-value} \leq \alpha \Rightarrow \text{reject } H_0$$

II. Requires: $n > 5 \div p$ & $n > 5 \div (1-p)$

$$z = \frac{\bar{p} - p}{\sigma \div \sqrt{n}} \quad \& \quad \sigma = \sqrt{p(1-p)}$$

III. Examples (pp.477-480): #6,12,18

HW: pp.477-480 / #5,7,11,13,19