

CH 7.10

$$\hat{p} = \frac{45}{100} = 0.45$$

$$\alpha = 0.05$$

$$H_0: p \leq 0.4$$

$$H_1: p > 0.4$$

$$C = (Z > Z_{0.05}) = (Z > 1.645)$$

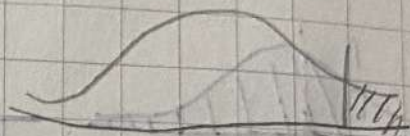
$$Z = \frac{\hat{p} - p_0}{\sqrt{\frac{p_0(1-p_0)}{n}}}$$

$$= \frac{0.45 - 0.4}{\sqrt{\frac{0.4(0.6)}{100}}}$$

$$= \frac{0.05}{\sqrt{0.0024}}$$

$$= 1.021$$

$Z < Z_{\alpha}$ 接受



$$Z_{0.05} = 1.645$$

CH 7.11

$$H_0: \frac{\sigma_1^2}{\sigma_2^2} = 1$$

$$H_1: \frac{\sigma_1^2}{\sigma_2^2} \neq 1$$

2个变量数
相同

$$\alpha = 0.1$$

$$1 - \alpha = 0.9$$

$$\frac{\alpha}{2} = 0.05$$

$$C = \{F < F_{1-\frac{\alpha}{2}}(n_1-1, n_2-1)\}$$

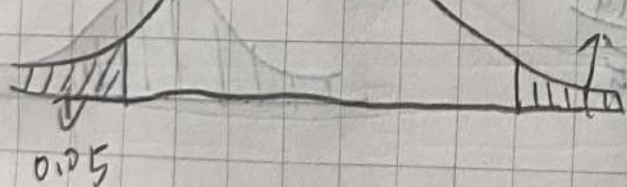
$$= \{F < F_{0.95}(9, 9)\} = \{F < 0.304\}$$

$$P_5 F_{0.95}(9, 9)$$

$$= \frac{1}{3.29} = 0.304$$

$$= 0.304$$

$$F_{0.95}(9, 9)$$



$$= \{F > F_{\frac{\alpha}{2}}(n_1-1, n_2-1)\} = \{F > F_{0.05}(9, 9)\}$$

$$= \{F > 3.68\}$$

$$F_{0.05}(9, 9) = 3.68$$

$$F = \frac{S_1^2}{S_2^2} = \frac{0.653^2}{0.627^2} = 1.085$$