

Content:

7-12

$$\hat{p} = \frac{145}{350} = 0.414$$

$$(1) H_0: p \leq 0.4$$

$$H_1: p > 0.4$$

$$b) \alpha = 0.05$$

$$c) \text{棄卻域 } C = \{z > z_{0.05}\} = \{z > 1.645\}$$

$$d) z = \frac{\hat{p} - p_0}{\sqrt{\frac{p_0(1-p_0)}{n}}} = \frac{0.414 - 0.4}{\sqrt{\frac{0.4(1-0.4)}{350}}} = 0.532$$

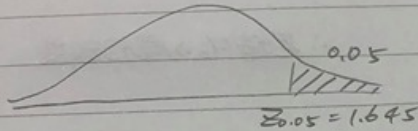
$$P_{\text{值}} = P(z > 0.532)$$

$$= P(z > 0.53)$$

$$= 1 - 0.7019$$

$$= 0.2981 > \alpha$$

∴ 不棄卻虛無假設



習 10

$$① H_0: p \leq 0.4$$

$$H_1: p > 0.4$$

$$② \alpha = 0.05$$

$$③ \text{棄卻域 } C = \{z > z_{0.05}\} = \{z > 1.645\}$$

$$④ \text{檢定統計量 } z = \frac{\hat{p} - p_0}{\sqrt{\frac{p_0(1-p_0)}{n}}} = \frac{0.45 - 0.4}{\sqrt{\frac{0.4(1-0.4)}{100}}} = 1.021$$

接受 H_0