

7.12

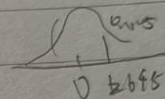
date

No.

$$\hat{p} = \frac{145}{350} = 0.414 \quad H_0: p \leq 0.4 \quad H_1: p > 0.4 \quad \alpha = 0.05$$

$$C = \{Z > Z_{\alpha/2}\} = \{Z > 1.145\}$$

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



$$P\text{-value} = P(Z > 0.532)$$

$$= P(Z > 0.53)$$

$$= 1 - 0.7019$$

$$= 0.2981 > \alpha \quad \text{不棄卻虛無假設}$$