

### 例 7.13

(1)  $H_0 = P_1 - P_2 \leq 0$ ,  $H_1 = P_1 - P_2 > 0$

(2)  $\alpha = 0.05$

(3) 棄卻域  $C = \{z > z_\alpha\} = \{z > 1.645\}$

(4) 已知  $n_1 = 200$ ,  $n_2 = 150$ ,  $X = 108$ ,  $Y = 78$

$$\hat{p}_1 = 0.54, \hat{p}_2 = 0.52$$

$$\bar{p} = \frac{x+y}{n_1+n_2} = \frac{108+78}{200+150} = 0.531$$

$$Z = \frac{0.54 - 0.52}{\sqrt{0.531(1-0.531)\left(\frac{1}{200} + \frac{1}{150}\right)}} = 0.371$$

$\therefore$  無多於女性