例 7.13

(1)

$H_0: P_1 - P_2 \leq 0$, $H_1: P_1 - P_2 > 0$

(2)

$\alpha = 0.05$

(3)

弃却域 $C = \{ z > z_\alpha \} = \{ z > 1.645 \}$

(4)

已知 $n_1 = 200$, $n_2 = 150$, $X = 108$, $Y = 78$, $\hat{P_1} = 0.54$, $\hat{P_2} = 0.52$

$$\bar{P} = \frac{X + Y}{n_1 + n_2} = \frac{108 + 78}{200 + 150} = 0.531$$