

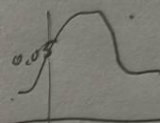
7.6.

$$H_0: \mu_1 - \mu_2 \geq 0.$$

$$H_1: \mu_1 - \mu_2 < 0$$

$$\alpha = 0.05.$$

$$C = \{z < -z_\alpha\} = \{z < -1.645\}$$



$$Z = \frac{\bar{X} - \bar{Y}}{\sqrt{\frac{s_1^2}{n_1} + \frac{s_2^2}{n_2}}} = \frac{6.98 - 7.2}{\sqrt{\frac{0.78^2}{20} + \frac{0.73^2}{180}}} = -2.801$$

棄卻虛無假設，男生少於女生。