

$$5/26 \quad q=30-24=00$$

$$5/28 = \text{單輪}$$

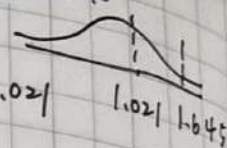
$$7/9-10 \quad q=30-19=00$$

$$10. \quad Z_{0.05} = 1.645 \quad H_0: P \geq 0.4$$

$$H_1: P < 0.4$$

拒絕  $H_0$

$$Z = \frac{\hat{p} - p_0}{\sqrt{\frac{p_0(1-p_0)}{n}}} = \frac{0.45 - 0.4}{\sqrt{\frac{0.4(0.6)}{100}}} = 1.021$$



$$6. \quad \bar{x} = 4.65, S = 1.26$$

(1)

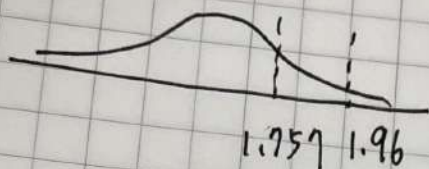
$$n=40 \quad H_0: \mu = 4.3$$

$$\alpha=0.05 \quad H_1: \mu \neq 4.3$$

$$Z_{0.025} = 1.96$$

$$\frac{4.65 - 4.3}{\frac{1.26}{\sqrt{40}}} = 1.757$$

接受  $H_0$



(2)

$$n=80$$

$$H_0: \mu = 4.3$$

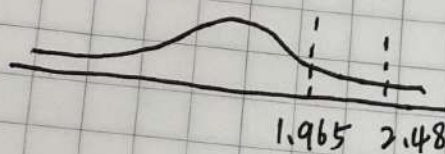
$$\alpha=0.05 \quad H_1: \mu \neq 4.3$$

拒絕  $H_0$

$$\frac{4.65 - 4.3}{\frac{1.26}{\sqrt{80}}} = 2.485$$

$$Z_{0.025} = 1.96$$

$$1.965 \quad 2.485$$



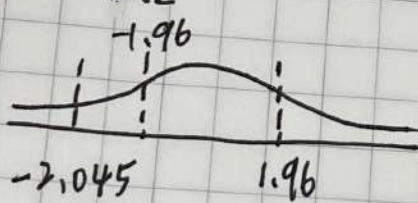
$$7. \quad H_0: \mu_1 = \mu_2$$

$$H_1: \mu_1 \neq \mu_2$$

$$Z_{0.025} = 1.96$$

$$\frac{(\bar{x} - \bar{y}) - 0}{\sqrt{\frac{s_1^2}{n_1} + \frac{s_2^2}{n_2}}} = \frac{3.83 - 40.1}{\sqrt{\frac{40}{100} + \frac{30}{100}}} = -2.045$$

$$-2.045 \quad 1.96$$



拒絕  $H_0$

$$8. \quad H_0: \mu_1 = \mu_2, H_1: \mu_1 \neq \mu_2$$

$$\frac{(\bar{x} - \bar{y})}{SP \sqrt{\frac{1}{n_1} + \frac{1}{n_2}}} = \frac{32 - 34}{3.430 \sqrt{\frac{1}{64} + \frac{1}{81}}} = 3.486$$

$$3.430 \sqrt{\frac{1}{64} + \frac{1}{81}}$$

$$= 3.486$$

$$SP = \sqrt{\frac{(n_1-1)s_1^2 + (n_2-1)s_2^2}{n_1 + n_2 - 2}} = \sqrt{\frac{63 \times 3.2^2 + 80 \times 3.6^2}{143}} = 3.430$$

$$= 3.430$$

拒絕  $H_0$



$$-3.486 \quad -1.96$$

$$9. \quad \alpha_{0.025}(n_1+n_2-2) = \alpha_{0.025}(18) = 2.101$$

$$H_0: \mu_1 = \mu_2$$

$$H_1: \mu_1 \neq \mu_2$$

$$\frac{82.6 - 84.9}{5.693 \sqrt{\frac{1}{10} + \frac{1}{10}}} = -0.903$$

$$SP = \sqrt{\frac{9 \times (4.5265)^2 + 9 \times (6.6575)^2}{18}} = 5.693$$

