

$$6 \quad \bar{x} = 4.65 \quad s = 1.26$$

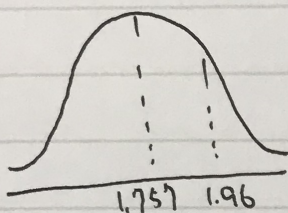
$$n = 40 \quad \alpha = 0.05$$

$$H_0: \mu = 4.3 \quad H_1: \mu \neq 4.3$$

$$Z_{0.025} = 1.96$$

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

$\Rightarrow$  不拒絕



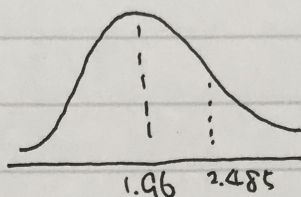
$$n = 80 \quad \alpha = 0.05$$

$$H_0: \mu = 4.3 \quad H_1: \mu \neq 4.3$$

$$Z_{0.025} = 1.96$$

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

$\Rightarrow$  拒絕  $H_0$



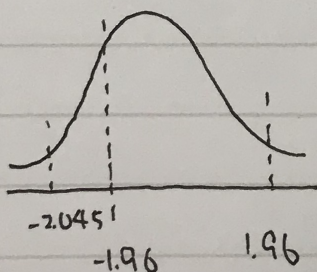
$$7. \quad H_0: \mu_1 = \mu_2$$

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

$$Z_{0.025} = 1.96$$

$$\frac{(\bar{x} - \bar{y}) - 0}{\sqrt{\frac{s_1^2}{n_1} + \frac{s_2^2}{n_2}}} = \frac{38.3 - 40.1}{\sqrt{\frac{40}{100} + \frac{30}{20}}} = -2.045$$

$\Rightarrow$  拒絕  $H_0$



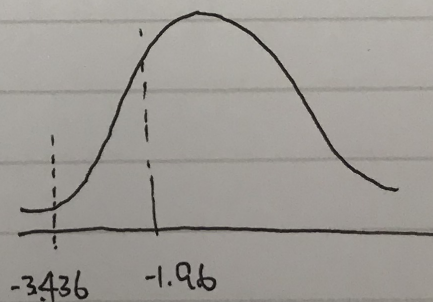
$$8. \quad H_0: \mu_1 = \mu_2$$

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

$$\frac{(\bar{x} - \bar{y}) - 0}{S_p \sqrt{\frac{1}{n_1} + \frac{1}{n_2}}} \cdot \left[ S_p = \sqrt{\frac{(n_1 - 1)s_1^2 + (n_2 - 1)s_2^2}{n_1 + n_2 - 2}} \right]$$

$$= \frac{32 - 34}{3.430 \cdot \sqrt{\frac{1}{64} + \frac{1}{81}}} = \frac{63 \times (3.2)^2 + 80 \times (3.6)^2}{143} = 3.430$$

$$= 3.486$$



$\Rightarrow$  拒絕  $H_0$