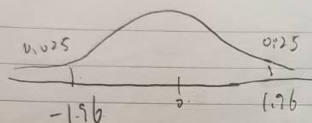


7.3

$$H_0: \mu = 30, H_1: \mu \neq 30, \alpha = 0.05$$

$$\text{棄卻域 } C = \{ |z| > z_{1-\alpha/2} \} = \{ |z| > 1.96 \}$$

$$z = \frac{\bar{x} - \mu_0}{\frac{s}{\sqrt{n}}} = \frac{30.563 - 30}{\frac{2.354}{\sqrt{564}}} = 1.913$$



7.4

$$P\text{-值} = 2P(Z > 1.913)$$

$$\approx 2P(Z > 1.91)$$

$$= 2 \times 0.0281$$

$$= 0.562 > \alpha$$

∴ 不棄卻虛無假設

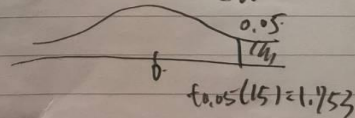
7.5

$$H_0: \mu \leq 55, H_1: \mu > 55$$

$$\alpha = 0.05$$

$$C = \{ \bar{T} > t_{0.05}(15) \} = \{ \bar{T} > 1.75 \}$$

$$\bar{T} = \frac{\bar{x} - \mu_0}{\frac{s}{\sqrt{n}}} = \frac{29.312 - 55}{\frac{13.187}{\sqrt{16}}} = 1.308$$



$$P\text{-值} = P(\bar{T} > 1.308)$$

$$\approx P(\bar{T} > 1.31)$$

∴ P-值介於 0.1 - 0.25 之間, P-值 > 0.05

∴ 不棄卻虛無假設