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例 6.7 ① $1-\alpha=0.95, \frac{\alpha}{2}=0.025, z_{\frac{\alpha}{2}}=z_{0.025}=1.96$

$$\bar{x} \pm z_{\frac{\alpha}{2}} \frac{s}{\sqrt{n}} = 16.33 \pm 1.4019$$

$$= 17.7314 \text{ or } 14.9286$$

② $1-\alpha=0.90, \frac{\alpha}{2}=0.05, z_{\frac{\alpha}{2}}=z_{0.05}=1.645$

$$\bar{x} \pm z_{\frac{\alpha}{2}} \frac{s}{\sqrt{n}} = 16.33 \pm 1.645$$

$$= 17.506175 \text{ or } 15.153825$$

例 6.8 $1-\alpha=0.95, \frac{\alpha}{2}=0.025, z_{\frac{\alpha}{2}}=z_{0.025}=1.96, \bar{c}=3.5, n=20, \mu=8$

$$\bar{x} \pm z_{\frac{\alpha}{2}} \frac{\bar{c}}{\sqrt{n}} = 8 \pm 1.96 \cdot \frac{3.5}{\sqrt{20}}$$

$$= 8 \pm 4.47$$

$$= 12.47 \text{ or } 3.53$$

例 6.19 $1-\alpha=0.95, z_{\frac{\alpha}{2}}=z_{0.025}=1.96, e=0.01, \rho=0.05$

$$h = \left(\frac{z_{\frac{\alpha}{2}} \rho}{e} \right)^2 = \left(\frac{1.96 \times 0.05}{0.01} \right)^2 = 96.04$$

$$97 - 35 = 62$$

A: $h=97$, 應增加 62 袋