

習題3  $n=10$   $\bar{x} = 13.63$

$$S = \sqrt{\frac{\sum x_i^2 - n\bar{x}^2}{n-1}} = \sqrt{\frac{-10 \cdot 13.63^2}{9}}$$

$$= 6.05$$

$$\sum x_i^2 = 7.84 + 17.64 + 524.41 + 278.89 +$$

$$1 - \alpha = 0.98 \quad \frac{\alpha}{2} = 0.01$$

$$\alpha = 0.02$$

$$\bar{x} \pm t_{\frac{\alpha}{2}}(n-1) \frac{S}{\sqrt{n}} = 13.63 \pm t_{0.01}(9) \frac{6.05}{\sqrt{10}}$$

$$= 13.63 \pm 2.821 \times 1.91$$

$$= 13.63 \pm 5.39$$

$$(8.24, 19.02)$$