

No. \_\_\_\_\_  
Date : \_\_\_\_ : \_\_\_\_ : \_\_\_\_

### 習題②

(1)  $1-\alpha=0.95, e=0.5$

$$n = \left(\frac{3}{0.05}\right)^2 \times 1.96^2$$

$$= 138.3 \approx 139$$

(2)  $1-\alpha=0.9, e=0.03$

$$n = \left(\frac{0.2}{0.03}\right)^2 \times 1.645^2$$

$$= 120.27 \approx 121$$

(3)  $1-\alpha=0.98, e=0.02$

$$n = \left(\frac{0.05}{0.02}\right)^2 \times 2.326^2$$

$$= 33.8 \approx 34$$

### 習題⑥

$$1250 \pm z_{0.025} \sqrt{\frac{140^2}{120}} = 1250 \pm 25.05$$

$$\Rightarrow (1224.95, 1275.05)$$

### 習題⑩

(1)  $\bar{x} - \bar{y} = 85 - 78 = 7$

(2)  $7 \pm 1.645 \sqrt{\frac{154}{50} + \frac{146}{40}}$

$$= 7 \pm 1.645 \times 2.59$$

$$= 7 \pm 4.26$$

$$\Rightarrow (2.74, 11.26)$$