第十三章

1.

$68.665 \le \mu \le 84.669$ (分)

2.

$\mu = [95.233, 110.517]$

3.

$\mu = [73.065, 79.823]$

4.

$\mu = [67.991, 84.897]$

5.

$1.40 \le \mu \le 2.24$

6.

461

7.

(1)1200 小時

(2)$1165.35 \le \mu \le 1234.65$ 小時

最大誤差： $E = 1.96\sqrt{\frac{100^2}{32}} = 34.648$

(3)65

8.

$\mu = [6.748, 9.252]$ 小時

9.

$842.75 \le \mu \le 847.25$

10.

$0.165 \le p \le 0.335$

11.

$0.336 \le p \le 0.464$

12.

385

13.

(1)0.38

(2) $0.2849 \le p \le 0.4751$

(3)2263

14.

(1)381

(2)355

(3)385

15.

(1)6.25

(2) $3.811 \le \sigma^2 \le 12.097$

(3) $1.952 \le \sigma \le 3.478$

16.

$$12.7346 \le \sigma^2 \le 36.8636$$

17.

$$1427.41 \le \mu_1 - \mu_2 \le 10772.59$$

18.

$$-0.738 \le \mu_1 - \mu_2 \le 7.238$$

19.

$$(1)\,(\bar{x}_1 - \bar{x}_2) - 1.96\sqrt{\frac{1}{n_1} + \frac{3}{n_2}} \le \mu_1 - \mu_2 \le (\bar{x}_1 - \bar{x}_2) + 1.96\sqrt{\frac{1}{n_1} + \frac{3}{n_2}}$$

$$(2)\, n_1 = 18, n_2 = 32$$

20.

$$-6.296 \le \mu_d \le 0.740$$

21.

$$(1)\, -0.007 \le p_1 - p_2 \le 0.147$$

$$(2)\, -0.21 \le p_1 - p_3 \le -0.13$$

22.

$$0.386 \le \sigma^2 \le 2.723$$

23.

$$0.123 \le \frac{\sigma_1^2}{\sigma_2^2} \le 3.438$$

24.

(1) $0.364 \le \dfrac{\sigma_A^2}{\sigma_B^2} \le 2.840$

(2) $-5.394 \le \mu_A - \mu_B \le -1.406$