



Precision
touchpad



Faster
wireless



Gigabit
Ethernet

Intel® Celeron® Quad Core Processor N3450

Intel® HD Graphics

4 GB DDR3 L Memory

128 GB

4107270049 第 10 题 企业 = ③

16 习题

1. (1) $t_{0.025}(10) = 2.228$

(2) $t_{0.95}(18) = -1.86$
1 - 0.05

(3) $\chi^2_{0.05}(12) = 21.026$

(4) $\chi^2_{0.95}(15) = 7.26$, 求 $\alpha = 0.95$

(5) $\chi^2_{0.95}(10) = 3.940$

(6) $F_{0.05}(5, 8) = 3.69$

(7) $F_{0.95}(6, 7) = 0.238$

$= \frac{1}{F_{0.95}}(7, 6) = \frac{1}{4.21} = 0.238$

(8) $F_{0.05}(6, 6) = 4.28$, 求 $\alpha = 0.05$

8. $\hat{p}_1 = 0.55$ $\hat{p}_2 = 0.6$

$(\hat{p}_1 - \hat{p}_2) \pm z_{\frac{\alpha}{2}} \sqrt{\frac{\hat{p}_1(1-\hat{p}_1)}{n_1} + \frac{\hat{p}_2(1-\hat{p}_2)}{n_2}}$

$= (0.55 - 0.6) \pm z_{0.025} \sqrt{\frac{0.55 \times 0.45}{100} + \frac{0.6 \times 0.4}{100}}$

$= -0.05 \pm 1.96 \times 0.07 = -0.05 \pm 0.14$

$\Rightarrow (-0.19, 0.29)$

教师授课

2. $e = \frac{\sigma}{\sqrt{n}} \times z_{\frac{\alpha}{2}}$

7. (1) $\hat{p} = \frac{45}{89} = 0.51$

(2) $z_{\frac{\alpha}{2}} \sqrt{\frac{\hat{p}(1-\hat{p})}{n}} = z_{0.025} \sqrt{\frac{0.51 \times 0.49}{89}} = 1.96 \times 0.06$
 $= 0.12$

(3) $\hat{p} \pm z_{\frac{\alpha}{2}} \sqrt{\frac{\hat{p}(1-\hat{p})}{n}} = 0.51 \pm z_{0.05} \sqrt{\frac{0.51 \times 0.49}{89}}$
 $= 0.51 \pm 1.645 \times 0.06$
 $= 0.51 \pm 0.1 \Rightarrow (0.41, 0.61)$

21. (1) $\hat{p} = \frac{105}{250} = 0.42$

$0.42 \pm z_{0.05} \sqrt{\frac{0.42 \times 0.58}{250}}$
 $= 0.42 \pm 1.645 \times 0.03 = 0.42 \pm 0.05$
 $\Rightarrow (0.37, 0.47)$

(2) a. $\hat{p} = 0.3$ $e = 0.03$ $1 - \alpha = 0.95$

$e = \frac{\sigma}{\sqrt{n}} \times z$ $n = (\frac{z}{e})^2 \times \hat{p} \times (1-\hat{p})$
 $n = (\frac{1.96}{0.03})^2 \times 0.3 \times 0.7$
 $= 896.37 \approx 897$

b. $\hat{p} = 0.42$

$n = (\frac{1.96}{0.03})^2 \times 0.42 \times 0.58 = 1039.79$
 ≈ 1040

c. $\hat{p} = 0.5$

$n = (\frac{1.96}{0.03})^2 \times 0.5 \times 0.5 = 1067.11$
 ≈ 1068