

Practice, #1-3, pg. 115-109

① a) $\frac{141}{300}$ 47%

b) $\sqrt{\frac{.47(1-.47)}{300}} \approx .029$ 2.9% $.47 - 2(.029) = .412$
 $.47 + 2(.029) = .528$

95% confidence interval: from 41.2% to 52.8%

c) 95% confidence interval: from 46.6% to 55.4%

d) $.51(500) = 255$ parents said they were in favor of mandatory school uniforms.

e) Probably the students' survey - larger sample size.

② a) $\frac{s}{\sqrt{n}} = \frac{3.4}{\sqrt{200}} \approx 0.24$ hours 95% C.I.

b) $11.7 - 2(0.24)$ 11.22 to 12.18 hours
 $11.7 + 2(0.24)$

③ a) $\frac{2.7}{\sqrt{500}} \approx 0.12$ hours

b) $9.2 - 2(0.12)$ 95% C.I.
 $9.2 + 2(0.12)$ 8.96 to 9.44 hours