

In-Class  
Sections 8.3-8.4

Name\_\_\_\_\_

- 1) Use the given data to construct a confidence interval of the requested level.  
 $x = 114$ ,  $n = 228$ , confidence level 90%
  
  
  
  
  
  
  
  
  
  
- 2) In a survey of 302 registered voters, 167 of them wished to see Mayor Waffleskate lose her next election. Find a point estimate for the proportion of registered voters who wish to see Mayor Waffleskate defeated.
  
  
  
  
  
  
  
  
  
  
- 3) In a survey of 314 registered voters, 156 of them wished to see Mayor Waffleskate lose her next election. Construct a 95% confidence interval for the proportion of registered voter who want to see Mayor Waffleskate defeated.

- 4) In a survey of 447 registered voters, 157 of them wished to see Mayor Waffleskate lose her next election. The Waffleskate campaign claims that no more than 27% of registered voters wish to see her defeated. Does the 98% confidence interval for the proportion support this claim? (Hint: you should first construct the 98% confidence interval for the proportion of registered voters who wish to see Waffleskate defeated.)  
(0.299, 0.404)

- 5) Following are the heights in inches of 12 two-year-old apple trees. Assume that the population is normally distributed.

37.5	35.3	39.2	38.7	43.0	41.9
36.7	38.0	40.9	38.3	37.8	41.8

Construct a 90% confidence interval for the population standard deviation  $\sigma$ .

- 6) Measurements were made of the milk fat content (in percent) in six brands of feta cheese (a variety of goat cheese), with the following results. Assume that the population is normally distributed.

27.4	11.6	16.5	16.1	29.7	11.7
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Construct a 95% confidence interval for the population standard deviation  $\sigma$ .

Answer Key

Testname: INCLASS8.3-8.4

- 1) (0.446, 0.554)
- 2) 0.5530
- 3) (0.441, 0.552)
- 4) No
- 5) (1.75, 3.62)
- 6) (4.90, 19.24)