

Kissing the Right Way?

According to an article in the San Gabriel Valley Tribune, "Most people are kissing the 'right way'." That is, according to the study, the majority of couples tilt their heads to the right when kissing. In the study, a researcher observed a random sample 124 couples kissing in various public places and found that 83/124 (66.9%) of the couples tilted to the right. Construct and interpret a 95% confidence interval for the proportion of all couples who tilt their heads to the right when kissing.

Tattoos

Suppose that you wanted to estimate the p = the true proportion of students at your school that have a tattoo with 95% confidence and a margin of error of no more than 0.10. What's the minimum number of students you would need to survey?

How much homework?

Mr. Shinn wants to estimate how much time students spend on homework, on average, during a typical week. He wants to estimate at the 90% confidence level with a margin of error of at most 30 minutes. A pilot study indicated that the standard deviation of time spent on homework per week is about 154 minutes. What's the minimum number of students you would need to survey?