**MAT 150.5 Statistics Assignment #15**

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1. A recent Gallop poll showed Trump’s approval rating 40% with a margin or error of 3%.

a) Find the confidence interval.

b) Does the confidence interval support that more than 50% of Americans approve of Trump? Why or why not?

2. A recent Gallop poll showed that 672 of 1019 adults nationwide think that marijuana should be legalized.

a) Find the margin of error that corresponds to a 95% confidence interval.

b) Find the 95% confidence interval estimate of the proportion of adults nationwide who think marijuana should be legalized.

3. In a recent survey of 1002 people, 701 said that they voted in a recent presidential election. Voting records show that 61% of eligible voters actually did vote.

a) Find the 95% confidence interval estimate of the proportion of people who say that they voted.

b) Are the survey results consistent with the actual voter turnout of 61%? Why or why not?

c) How would the confidence interval change if we increased the confidence level to 99%? Find the 99% confidence interval estimate to support your answer.

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