Classroom Voting Questions: Statistics

Comparing Two Proportions

1. A two proportion z interval was constructed for the difference in the two population proportions, p_1 and p_2. The resulting 99% confidence interval was $(-0.004, 0.12)$. A conclusion that could be drawn is:

   (a) There is no significant difference between p_1 and p_2.

   (b) There is a significant difference between p_1 and p_2.

   (c) The range of possible differences between the two proportions could be from a 0.4% difference with p_2 being larger up to a 12% difference with p_1 being larger.

   (d) Both (a) and (c) are correct.

   (e) Both (b) and (c) are correct.

   Answer: (a). Answer (c) is almost correct, but we could only say that with 99% confidence.

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