

inductive generalization handout

Americans' support for keeping the Electoral College system for electing presidents has increased sharply. Weeks after the 2016 election, 47 percent of Americans say they want to keep the Electoral College, while 49 percent say they want to amend the Constitution to allow for a popular vote for president. Results for this Gallup poll are based on telephone interviews conducted Nov. 28-29, 2016, on the Gallup U.S. Daily survey, with a random sample of 1,000 adults, aged 18 and older, living in all 50 U.S. states and the District of Columbia. (<http://www.gallup.com/poll/198917/americans-support-electoral-college-rises-sharply.aspx>)

(1) Write this out as an argument (Only include the premises that are needed. You have to supply the conclusion; make it about keeping the Electoral College.)

Tom wants to ask a foreign student a question about attending State University. According to the University, 8 percent of students at State are residents of foreign countries. What is the probability that one (and only one) of the next three students that Tom sees will be a foreign student?

(2.a) Write this out as an argument. Make the answer to the question the conclusion.

(2.b) How much stronger does the argument become with this conclusion?

[C] Therefore, at least one of the next three students will be a foreign student.

(3) 1000 people are randomly selected and asked who they support in the upcoming statewide election. 49 percent say that they support Candidate A and 51 percent say Candidate B. Which of the following are true? (More than one is true.)

- (a) In the whole state, Candidate B has a little bit more support than Candidate A.
- (b) More people in the state might support Candidate A.
- (c) Less than half of the people in the state might support Candidate B.
- (d) Candidate A and Candidate B might have exactly the same amount of support from the citizens of this state.
- (e) In terms of current support, Candidate B might lead Candidate A by 10 percent.
- (f) In term of current support, Candidate A might lead Candidate B by 4 percent.

(4) 100 students who use the dining hall are randomly selected and asked whether they are satisfied with the dessert bar. Forty-five say that they are satisfied. Which of the following are true? (More than one is true.)

- (a) A majority of all students who use the dining hall might be satisfied with the dessert bar.
- (b) Less than a third of all students who use the dining hall might be satisfied with the dessert bar.
- (c) Less than half of all students who use the dining hall are satisfied with the dessert bar.
- (d) Definitely less than 70 percent of all students who use the dining hall are satisfied with the dessert bar.
- (e) It's very likely that less than 70 percent of all students who use the dining hall are satisfied with the dessert bar.