Valid Claims

1. Bella Wants to conduct a survey to determine how many of the residents of Forks believe in supernatural creatures.

Which of the following survey methods will allow Bella to make a valid conclusion about the percentage of residents of Forks that believe in supernatural creatures?

A. Ask a randomly selected sample of residents to answer the question anonymously.

B. As a randomly selected sample of high school students to answer the question anonymously.

Answer: A

Because Both groups are random samples, so Bella could generalize the results from each sample to the population from which they came.

Which population is Bella Interested in?

Bella wants to draw a conclusion about the residents of Forks, not about the students at the high school.

2. Tasty Treats Baking Company asked all students in the senior class at Ridgemont High School the question, “DO you prefer chocolate or butterscotch Tasty Treats?”. Everyone surveyed had to pick one of the two answers and 42 percent said they preferred chocolate.

Based on this data, which of the following conclusions are valid?

A. 42 percent of all students at Ridgemont High prefer chocolate.

B. 42 percent of all students in the senior class at Ridgemont High prefer chocolate.

C. 42 percent of the male students in the senior class at Ridgemont High prefer chocolate, but we cannot conclude anything about the population.

Answer: B

3. Santos wants to know what percentage of people who get married in his county knew each other in school.

Which of the following survey methods will allow Santos to make a valid conclusion about the percentage of couples married in his country who knew each other in school?

A. Get a list of 30 couples most recently married in his county, then ask them.

B. Sort a list of couples married in his country into a random order, then ask the first 30 couples on that list.

Answer: B