

# Data inferences



倒卖必然断更 一手资源加微信: tt19222222  
关注微信公众号【研者荣耀】 课程福利QQ群: 928825017

1. A random sample of 35 four-door passenger vehicles had a mean gas mileage, in miles per gallon (mpg), of 25.9 mpg. The estimate had a margin of error of 2.6 mpg at a 98% confidence level. Of the following, which is most plausible value for the true mean of the mileage of four-door passenger vehicles in general?

- A. 24 mpg
- B. 29 mpg
- C. 32 mpg
- D. 35 mpg

倒卖必然断更 一手资源加微信: tt19222222

关注微信公众号【研者荣耀】 课程福利QQ群: 928825017

2. Based on random samples of river heights, oceanographers estimate that 4,800 cubic kilometers ( $\text{km}^3$ ) of freshwater is discharged into the Arctic Ocean annually. The estimate has a margin of error of 240  $\text{km}^3$  at the 90% confidence level. Which of the following is the most reasonable claim about the volume of freshwater discharged annually into the Arctic Ocean?

- It is between 4,800 and 5,040  $\text{km}^3$ .
- It is between 4,560 and 5,040  $\text{km}^3$ .
- It is between 240 and 4800  $\text{km}^3$ .
- It is between 240 and 4320  $\text{km}^3$

倒卖必然断更 一手资源加微信: tt19222222

关注微信公众号【研者荣耀】 课程福利QQ群: 928825017

3. A random sample of international flights in 2013 showed that 79% of the flights arrived within 15 minutes of their scheduled arrival time, and this estimate had a margin of error of 3% at a 95% confidence level. Which of the following conclusions is best?

- A. Exactly 79% arrived within 15 minutes of their scheduled times.
- B. Exactly 76% arrived within 15 minutes of their scheduled times.
- C. Between 76% and 82% arrived within 15 minutes of their scheduled times.
- D. Between 92% and 98% arrived within 15 minutes of their scheduled times.

倒卖必然断更 一手资源加微信: tt19222222

关注微信公众号【研者荣耀】 课程福利QQ群: 928825017

4. In a study of 40 randomly selected captive *Octopus vulgaris*, researchers found that the octopi could learn to integrate visual and tactile information to find food after a mean of 119 trials. The estimate had a margin of error of 18 trials at a 95% confidence level. Which of the following is the most reasonable conclusion about the number of trials it would take all captive *Octopus vulgaris* in general to learn to find the food?

- A. The evidence suggests that half of them would require 119 or fewer trials.
- B. The evidence suggests that the mean number of trials would be 119 trials.
- C. The evidence suggests that the mean number of trials would be between 119 and 137 trials.
- D. The evidence suggests that the mean number of trials would be between 101 and 137 trials.

倒卖必然断更 一手资源加微信: tt19222222

关注微信公众号【研者荣耀】 课程福利QQ群: 928825017

5. Researchers measured the heart rates of several randomly selected astronauts exercising on stationary bicycles during long-term space missions. The researchers found the mean heart rate of the astronauts was 155 beats per minute with a margin of error of 12 beats per minute at a 90% confidence level. Which of the following is the most plausible value for the mean heart rate of all astronauts exercising on stationary bicycles during long-term space missions?

- A. 130 beats per minute
- B. 140 beats per minute
- C. 160 beats per minute
- D. 175 beats per minute

倒卖必然断更 一手资源加微信: tt19222222

关注微信公众号【研者荣耀】 课程福利QQ群: 928825017

6. In a poll of 14,697 randomly selected adults in the United States, those polled spent an average of \$95 per day in November of last year, as compared with \$91 per day in November two years ago. The estimates had a margin of error of \$4 at the 95% confidence level. Which of the following is a reasonable claim to make based on this sample?

- A. All adults in the United States spent between \$91 and \$99 daily last November.
- B. 95% of adults in the United States spent between \$91 and \$99 daily last November.
- C. It is plausible that average daily spending of adults in the United States remained the same in November of last year as it was in November two years ago.
- D. Between 91% and 99% of adults in the United States spent \$4 more daily last November than in November two years ago

倒卖必然断更 一手资源加微信: tt19222222

关注微信公众号【研者荣耀】 课程福利QQ群: 928825017

7. In a particular county, a sample of the population showed that 84% of the households lived in the same residence as they had the previous year. The estimate had a margin of error of 1.5% at the 90% confidence level. If the county has 50,000 households, which of the following best estimates the number of households that lived in the same residence as they had the previous year, at the 90% confidence level?

- A. 34,500 to 49,500 residents
- B. 37,500 to 50,000 residents
- C. 41,250 to 42,750 households
- D. 44,250 to 45,750 households

倒卖必然断更 一手资源加微信: tt19222222

关注微信公众号【研者荣耀】 课程福利QQ群: 928825017



8. Prior to the 2014 elections, 1,000 randomly selected Louisiana voters were surveyed about what single issue would most likely influence their vote. Of those surveyed, 560 voters answered that the state of the economy would most influence their vote. Based on this information, which statement about all voters in Louisiana is most appropriate?

- A. Exactly 56% of all Louisiana voters thought the state of the economy would most influence their voting.
- B. Approximately 56% of all Louisiana voters thought the state of the economy would most influence their voting.
- C. Exactly 56% of Louisiana voters would vote for the candidate with the best plan to improve the economy.
- D. Approximately 56% of Louisiana voters would vote for the candidate with the best plan to improve the economy.

倒卖必然断更 一手资源加微信: tt19222222

关注微信公众号【研者荣耀】 课程福利QQ群: 928825017

# Thanks

新东方旗下官方网络课堂



倒卖必然断更 一手资源加微信: tt19222222

关注微信公众号【研者荣耀】 课程福利QQ群: 928825017