

Question ID e351a82d

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Problem-Solving and Data Analysis	Inference from sample statistics and margin of error	Hard

ID: e351a82d

Poll Results	
Angel Cruz	483
Terry Smith	320

The table shows the results of a poll. A total of **803** voters selected at random were asked which candidate they would vote for in the upcoming election. According to the poll, if **6,424** people vote in the election, by how many votes would Angel Cruz be expected to win?

- A. 163
- B. 1,304
- C. 3,864
- D. 5,621

ID: e351a82d Answer

Correct Answer: B

Rationale

Choice B is correct. It's given that **483** out of **803** voters responded that they would vote for Angel Cruz. Therefore, the proportion of voters from the poll who responded they would vote for Angel Cruz is $\frac{483}{803}$. It's also given that there are a total of **6,424** voters in the election. Therefore, the total number of people who would be expected to vote for Angel Cruz is $6,424 \left(\frac{483}{803} \right)$, or **3,864**. Since **3,864** of the **6,424** total voters would be expected to vote for Angel Cruz, it follows that $6,424 - 3,864$, or **2,560** voters would be expected not to vote for Angel Cruz. The difference in the number of votes for and against Angel Cruz is $3,864 - 2,560$, or **1,304** votes. Therefore, if **6,424** people vote in the election, Angel Cruz would be expected to win by **1,304** votes.

Choice A is incorrect. This is the difference in the number of voters from the poll who responded that they would vote for and against Angel Cruz.

Choice C is incorrect. This is the total number of people who would be expected to vote for Angel Cruz.

Choice D is incorrect. This is the difference between the total number of people who vote in the election and the number of voters from the poll.

Question Difficulty: Hard