Polling Percents

By David Schaffer

• With Election Day approaching, percents help polling pro Joe Carroll study the public's views.

Candidates across the U.S. anxiously await Tuesday, November 7--Election Day. Up for grabs: all 435 seats in the House of Representatives, 33 Senate seats, plus 36 elections for state governors.

Polls, or surveys, measure the public's support for candidates, or opinions on major issues such as terrorism and the environment. Joe Carroll of West Windsor, New Jersey, is a poll editor for Gallup, one of the most well-known polling organizations. Joe studies the results of polls.

Those results are usually reported with percents. A percent, also written as %, is a number out of 100. For example, say 57 percent of the people in a city support a certain candidate. That means 57 out of every 100 people in the poll say they will vote for the candidate. A percent can also be written as a fraction (57/100) or a decimal (.57).

A big concern for Joe is a poll's margin of error. "We may have a poll with one candidate receiving 48% of the vote and another 42%. But if the margin of error is 3%, then either candidate could actually be 3% higher or lower in their level of support," Joe told MATH. "Therefore the two candidates could actually be even--at 45%." This happens because they may not be polling the exact sort of people who will actually vote in the election.

Another factor Joe has to consider is the percent of people who don't yet know whom they support--the undecided voters. "Just before an election, that's usually a small number," he says, "But if an election is close, they can make the difference."

What to Do

Use the information in the article to answer the questions. (The polls in our questions are fictional.)

1. In a poll, 43% of people support one of the U.S. Senate candidates in New York State. Write 43% as a...

   a. fraction: ________

   b. decimal: ________
2. In the race for California Governor, a poll shows that 61% of people support one candidate. How many people is that out of every...

   a. 100 people? ________
   b. 200 people? ________
   c. 500 people? ________

3. In one town, a poll reveals that 28% of residents support a new tax to raise money for a new stadium. The poll's margin of error is 4%.

   a. What is the minimum percent of residents who support the tax? ________
   b. What is the maximum percent of residents who support the tax? ________

4. In a Congressional race in Wisconsin, a poll shows one candidate supported by 44% of voters, the other candidate by 52% of voters, and the rest of the voters undecided. What is the percent of undecided voters? ________

5. For the election of a Senator in Missouri, a poll finds Candidate A has the support of 45% of voters, and Candidate B has support from 44%. The poll's margin of error (the maximum that those percents could be off in either direction) is 3.5%.

   a. What is the largest percent lead that Candidate A has over Candidate B? ________
   b. Could both candidates be tied at 47%? ________
   c. Could both candidates be tied at 41%? ________

Going Pro

The Job: Poll Editor

The Money: Averages about $56,000 a year.

Necessary Skills: Ability to analyze data; strong knowledge of population statistics; solid writing and communication skills.

How to Get Started: Political poll workers often earn college degrees in political science, market research, or government. But working as a phone survey taker is a good start.

Joe Says: "It can be stressful to gather and report information quickly and accurately. But seeing the results of your work in major newspapers and on TV, and knowing it is trusted by millions of people, is very satisfying."

Answers

1a. 43/100
1b. .43
2a. 61 people
2b. 122 people
2c. 305 people
3a. 24%
3b. 32%

4. 4%

5a. 8%
5b. Yes
5c. No