130 Chapter 8

Exercise - Populations, Samples, and Random Selection

Questions 1-3 refer to the following information.

	Voted for Candidate A	Voted for Candidate <i>B</i>	Voted for Other Candidates	Total
Ages 18 to 30	84	46	30	160
Ages 31 to 55	72	90	48	210
55 years or older	31	76	23	130
Total	187	212	101	500

A polling organization takes a random sample of 500 voters who voted for the mayoral election of a large western city. The organization gathered data right after the election, as shown in the table above.

1.

According to the data above, what percent of people from ages 31 to 55 voted for candidate *B*?

- A) 38%
- B) 43%
- C) 45%
- D) 48%

2

The total population of individuals in the city who voted for the election was about 450,000. What is the best estimate of the total number of votes for candidate B?

- A) 144,000
- B) 168,000
- C) 190,000
- D) 210,000

3

According to the data above, how many times more likely is it for ages 18 to 30 year olds to vote for candidate *A* than it is for ages 55 years or older to vote for candidate *A*?

- A) 2.2
- B) 2.4
- C) 2.6
- D) 2.8