## Exercise - Populations, Samples, and Random Selection

Questions 1-3 refer to the following information.

|  | Voted for <br> Candidate $A$ | Voted for <br> Candidate $B$ | Voted for <br> 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) $48 \%$

## 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

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

