

LESSON
11.1**Interdisciplinary Application***For use with the lesson "Find Probabilities and Odds"***Voting Rights**

History Voting is a method by which groups of people make decisions. In many countries, people vote to choose their leaders and to decide public issues. Citizens of democratic countries consider voting one of their chief rights because it allows them to choose who will govern them.

Since the 1800s, democratic nations have extended suffrage (the right to vote) to many people. The Constitution of the United States has been amended several times for this purpose. Women were not allowed to vote in most states until the ratification of the 19th Amendment in 1920. In 1971, the 26th Amendment lowered the voting age to 18 for all state and national elections.

Female Voters

Age	Population	Number registered
18 to 20 years old	5,692,000	3,080,000
21 to 24 years old	8,155,000	4,522,000
25 to 44 years old	41,515,000	25,967,000
45 to 64 years old	36,544,000	26,984,000
65 years and older	19,975,000	15,110,000

In Exercises 1–7, use the table above that shows the number of females of voting age and the number of these females that are registered to vote according to their ages.

1. Find the probability that a female from the 45–64 age group is a registered voter.
2. Find the probability that a female from the 18–20 age group is not a registered voter.
3. Find the probability that a female registered voter chosen at random is 25 to 44 years old.
4. Find the probability that a female registered voter chosen at random is not 21 to 24 years old.
5. Find the odds of randomly choosing a female registered voter that is 65 years and older.
6. Find the odds of randomly choosing a female registered voter that is 25 years to 64 years old.
7. Find the odds of randomly choosing a female ages 21 to 24 years old that is not a registered voter.