## **Practice Problems 11**

- 1. Assume that the first 5 customers of a store will receive a gift certificate of \$50, \$40, \$30, \$20, and \$10, respectively. If the store has 20 customers on a given day, in how many different ways can the gift certificates be distributed?
- 2. Assume that the first 5 customers of a store will receive a gift certificate of \$50 each. If the store has 20 customers on a given day, in how many different ways can the gift certificates be distributed?
- 3. In how many ways can we distribute 6 balls to 3 bins?
- 4. In how many ways can we distribute 3 soccer balls, 1 baseball and 2 footballs to 3 bins?
- 5. In how many ways can we shuffle the word "recitation"?
- 6. Assume that a coin is tossed 7 times. In how many cases will exactly 3 be heads?