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## **ESSON** 6.2 **Practice A**

For use with the lesson "Construct and Interpret Binomial Distributions"

## Make a table and a histogram showing the probability distribution for the random variable.

**1.** B = the number on a table tennis ball randomly chosen from a bag that contains 4 balls labeled "1", 4 balls labeled "2", and 2 balls labeled "3."

**2.** D = the absolute value of the difference when two six-sided dice are rolled.





Calculate the probability of tossing a coin 15 times and getting the given number of heads.

**3.** 4 **4.** 7 **5.** 10 **6.** 2

Calculate the probability of randomly guessing the given number of correct answers on a 20-question multiple choice exam that has choices A, B, C, and D for each question.

<b>7.</b> 5	<b>8.</b> 10	<b>9.</b> 15	<b>10.</b> 20
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- **11.** Automobile Accidents An automobile-safety researcher claims that 1 in 10 automobile accidents are caused by driver fatigue. What is the probability that at least three of five automobile accidents are cause by driver fatigue?
- **12.** Pet Allergies An analyst claims that about 70% of U.S. households own either a cat or a dog, and an estimated 10% of the U.S. population is allergic to animals.
  - **a.** What is the probability that exactly 1 person in a class of 20 students owns either a cat or a dog? (Assume that no two students in the class come from the same household.)
  - **b.** What is the probability that at most 3 students in a class of 20 students are allergic to animals?