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LESSON
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.7. 5
8. 10
9. 15
10. 20
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?
