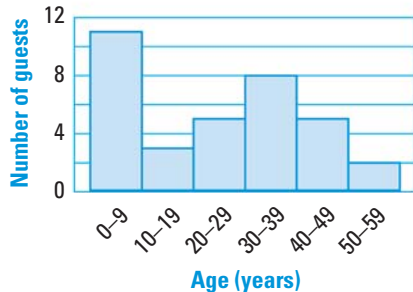


## MIXED TAKS PRACTICE

4. The histogram below represents the ages of guests who recently stayed at a hotel. Which statement must be true based on the data?

**TAKS Obj. 9**



- F** There were 40 guests who stayed at the hotel.
- G** The mean age was 32.
- H** The median age was in the 20s.
- J** The guests were mainly children.
5. Which expression is equivalent to  $\frac{x^3y^2 + xy}{x^2y}$ ? **TAKS Obj. 5**
- A**  $xy + 1$
- B**  $xy + \frac{1}{x}$
- C**  $\frac{x^2y + x}{x}$
- D**  $\frac{x^2y^2 + y}{y}$
6. Your friend is winning a game that uses 2 number cubes. The only way that you can win is if you roll doubles (the same number on each number cube) on each of the next 2 rolls. Find the probability that you roll doubles on each of the next 2 rolls. **TAKS Obj. 9**

- F**  $\frac{1}{1296}$
- G**  $\frac{1}{72}$
- H**  $\frac{1}{36}$
- J**  $\frac{1}{18}$

7. At a day camp, half of the campers swim in the morning, and 15% of the campers play softball in the afternoon. What is the probability that a camper selected at random swims in the morning and plays softball in the afternoon? **TAKS Obj. 9**

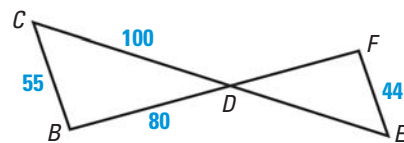
- A**  $\frac{3}{40}$
- B**  $\frac{1}{15}$
- C**  $\frac{1}{30}$
- D**  $\frac{1}{65}$

8. How would the graph of the function  $y = 2x^2 - 1$  be affected if it were changed to  $y = 2x^2 - 6$ ? **TAKS Obj. 5**
- F** The graph would shift 5 units down.
- G** The graph would shift 5 units to the right.
- H** The graph would shift 5 units to the left.
- J** Not here

9. Which line has a y-intercept of 3 and a slope of  $-\frac{4}{5}$ ? **TAKS Obj. 3.**

- A**  $y = 3 - \frac{4}{5}x$
- B**  $y = 3x - \frac{4}{5}$
- C**  $y = -\frac{4}{5}(x - 3)$
- D**  $y = 3\left(x - \frac{4}{5}\right)$

10. **GRIDDED ANSWER** If  $\triangle BCD$  is similar to  $\triangle FED$ , what is the length of side  $DE$ ? **TAKS Obj. 8**



Record your answer and fill in the bubbles on your answer document. Be sure to use the correct place value.