

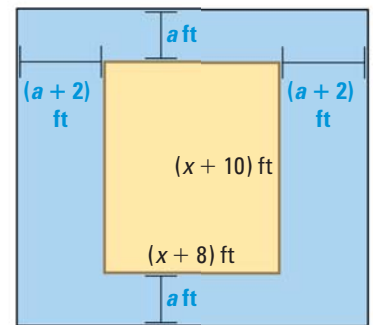
63. **TAKS REASONING** A square quilt has a border that is 1 foot wide on each side. The quilt has an area of 25 square feet. What is the side length of the quilt without the border?
- (A) 2 feet (B) 3 feet (C) 4 feet (D) 5 feet

64. **MULTIPLE REPRESENTATIONS** You toss a set of keys to a friend who is standing at a window 20 feet above the ground in a building that is 5 feet away from where you are standing. The path of the keys can be modeled by the graph of the equation $y = -x^2 + 8x + 5$ where x and y are measured in feet. On a coordinate plane, the ground is represented by the x -axis, and you are standing at the origin.

- a. **Making a Table** Make a table of values that shows the height of the keys for $x = 2, 4, 6,$ and 8 feet.
- b. **Drawing a Graph** Plot the ordered pairs in the table as points in a coordinate plane. Connect the points with a smooth curve.
- c. **Interpreting a Graph** Based on your graph, do you expect the keys to reach your friend? *Explain* your answer.
- d. **Using an Equation** Find the value of x when $y = 20$. (You may need to factor out a -1 in order to factor the trinomial.) What do you notice? *Explain* how the x -value justifies your answer from part (c).

65. **CHALLENGE** A rectangular stage is positioned in the center of a rectangular room, as shown. The area of the stage is 120 square feet.

- a. Use the dimensions given in the diagram to find the length and width of the stage.
- b. The combined area of the stage and the surrounding floor is 360 square feet. Find the length and width of the room.



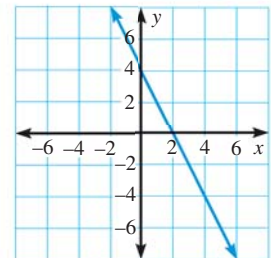
MIXED REVIEW FOR TAKS **TAKS PRACTICE** at classzone.com

REVIEW

Lesson 4.3;
TAKS Workbook

66. **TAKS PRACTICE** What are the x - and y -intercepts of the function graphed? **TAKS Obj. 3**

- (A) (1, 0) and (0, 2)
(B) (2, 0) and (0, 4)
(C) (2, 0) and (0, 1)
(D) (4, 0) and (0, 2)



REVIEW

Lesson 1.5;
TAKS Workbook

67. **TAKS PRACTICE** Which of the following would be least helpful in determining the amount of time it would take you to walk around a city block? **TAKS Obj. 10**

- (F) Your walking speed (G) The block's area
(H) The block's perimeter (J) The block's dimensions