Name _____ Date _____

LESSON 9.4 **Practice** *continued*
For use with pages 575–580

28. $6n^2 - 15n = 0$ **29.** $-8y^2 - 10y = 0$ **30.** $-10b^2 + 25b = 0$

31. $8c^2 = 4c$ **32.** $30r^2 = -15r$ **33.** $-24y^2 = 9y$

34. Diving Board A diver jumps from a diving board that is 24 feet above the water. The height of the diver is given by

$h = -16(t - 1.5)(t + 1)$

where the height h is measured in feet, and the time t is measured in seconds. When will the diver hit the water? Can you see a quick way to find the answer? *Explain.*

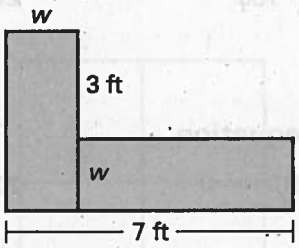
35. Dog To catch a frisbee, a dog leaps into the air with an initial velocity of 14 feet per second.

a. Write a model for the height of the dog above the ground.

b. After how many seconds does the dog land on the ground?

36. Desktop Areas You have two components to the desktop where you do your homework that fit together into an L shape. The two components have the same area.

a. Write an equation that relates the areas of the desktop components.



b. Find the value of w.

c. What is the combined area of the desktop components?