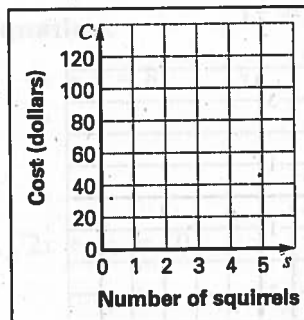


LESSON
4.5

Practice *continued*
For use with pages 243–250

30. Squirrels A family of squirrels takes up residence in the roof of your house. You call a company to get rid of the squirrels. The company traps the squirrels and then releases them in a wooded area. The company charges \$30 to drop off the traps and then charges \$15 for each squirrel it traps. The total cost C (in dollars) is given by the equation $C = 30 + 15s$ where s is the number of squirrels that are taken away.

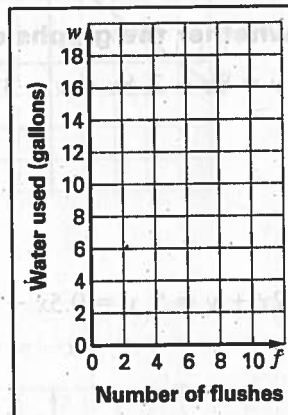


a. Graph the equation.

b. Suppose the company raises its fee to \$18 to take away each squirrel so that the total cost for s squirrels is given by the equation $C = 30 + 18s$. Graph the equation in the same coordinate plane as the equation in part (a).

c. How much more does it cost for the company to trap 4 squirrels after the fee is raised?

31. Water Usage A new toilet model has two different flush settings in order to conserve water. One setting uses 1.6 gallons of water per flush and the other setting uses 0.8 gallon of water per flush. The total amount w (in gallons) of water used in the first setting is given by the equation $w = 1.6f$ where f is the number of times the toilet is flushed. The total amount of water used in the second setting is given by the equation $w = 0.8f$.



a. Graph both equations in the same coordinate plane. What do the slopes and the w -intercepts mean in this situation?

b. How much more water is used by the first setting if the toilet is flushed 10 times?