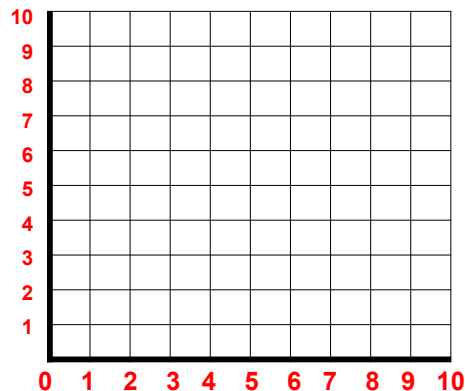# Chapter 4 Review

CARS After it is purchased, the value of a new car decreases $4000 each year. After 3 years, the car is worth $18,000.

a. Write an equation that represents the value V (in dollars) of the car x years after it is purchased.

b. What was the original value of the car?

APPLICATION

1) The cost y (in dollars) of taking a taxi x miles is $y = 2.5x + 2.$
   (a) Graph the equation. (b) Interpret the y-intercept and the slope.

Translating Word Problems into Slope-Intercept Form

2) For babysitting, Nicole charges a flat fee of $3, plus $5 per hour. Write an equation for the cost, y, after x hours of babysitting.

3) A canoe rental service charges a $20 transportation fee and $30 dollars an hour to rent a canoe. Write an equation representing the cost, y, of renting a canoe for x hours.

Translating Word Problems into Standard Form

4) A 100-point test has x questions worth 2 points apiece and y questions worth 4 points apiece.

   What is the total that is given? _____

   What do the variables stand for:

   x=_____, y= _____

   a. Write an equation that describes all possible numbers of questions that may be on the test.

Translating Word Problems into Standard Form

5) The Ramy family bought 4 sandwiches and 3 salads. They spent $24. Let x be the cost of a sandwich and y be the cost of a salad.

   What is the total that is given? _____

   What do the variables stand for:

   x=_____, y= _____

   a. Write an equation.