45. WEB SERVER The initial fee to have a website set up using a server is $48. It costs $44 per month to maintain the website.

   a. Write an equation that gives the total cost of setting up and maintaining a website as a function of the number of months it is maintained.

   b. Find the total cost of setting up and maintaining the website for 6 months.

   TEXAS *@HomeTutor*   for problem solving help at classzone.com

46. PHOTOGRAPHS A camera shop charges $3.99 for an enlargement of a photograph. Enlargements can be delivered for a charge of $1.49 per order. Write an equation that gives the total cost of an order with delivery as a function of the number of enlargements. Find the total cost of ordering 8 photograph enlargements with delivery.

   TEXAS *@HomeTutor*   for problem solving help at classzone.com

47. AQUARIUM Your family spends $30 for tickets to an aquarium and $3 per hour for parking. Write an equation that gives the total cost of your family's visit to the aquarium as a function of the number of hours that you are there. Find the total cost of 4 hours at the aquarium.

48. TAKS REASONING Scientists found that the number of ant species in Clark Canyon, Nevada, increases at a rate of 0.0037 species per meter of elevation. There are approximately 3 ant species at sea level.

   a. Write an equation that gives the number of ant species as a function of the elevation (in meters).

   b. Identify the dependent and independent variables in this situation.

   c. *Explain* how you can use the equation from part (a) to approximate the number of ant species at an elevation of 2 meters.

49. MULTIPLE REPRESENTATIONS The timeline shows the approximate total area of glaciers on Mount Kilimanjaro from 1970 to 2000.

Year	1970	1980	1990	2000
Area	5.2 km^2	4.1 km^2	3.0 km^2	1.9 km^2
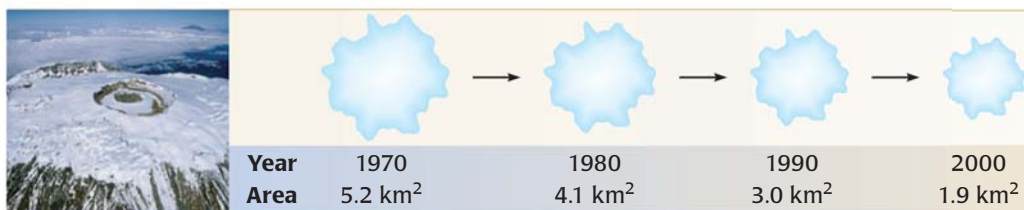
   a. Making a Table Make a table that shows the number of years x since 1970 and the area of the glaciers y (in square kilometers).

   b. Drawing a Graph Graph the data in the table. *Explain* how you know the area of glaciers changed at a constant rate.

   c. Writing an Equation Write an equation that models the area of glaciers as a function of the number of years since 1970. By how much did the area of the glaciers decrease each year from 1970 to 2000?

   ○ = **WORKED-OUT SOLUTIONS**
        on p. WS1

   = **TAKS PRACTICE AND REASONING**

   ◆ = **MULTIPLE REPRESENTATIONS**