Lesson 4

Multiple Representations of Functions

Guided Practice

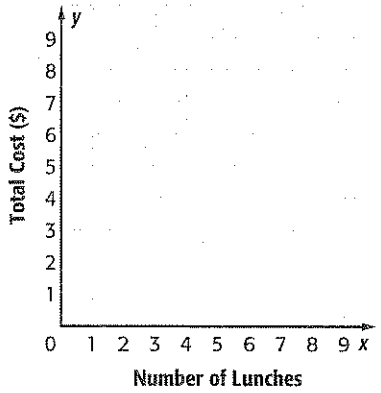
1. The school cafeteria sells lunch passes that allow a student to purchase any number of lunches in advance for $3 per lunch. (Examples 1–4)

   a. Write an equation to find t, the total cost in dollars for a lunch pass with n lunches.

   b. Make a function table to show the relationship between the number of lunches n and the cost t.

Number of Lunches, n			
Total Cost ($), t			

   c. Graph the ordered pairs. Analyze the graph.



Independent Practice

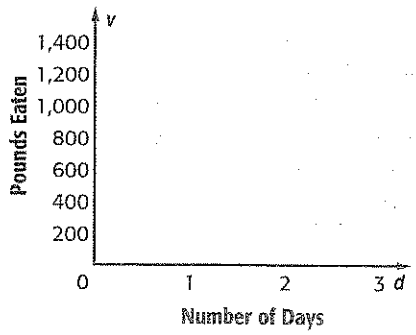
1. An African elephant eats 400 pounds of vegetation each day. (Examples 1–4)

   a. Write an equation to find v, the number of pounds of vegetation an African elephant eats in d days.

   b. Make a table to show the relationship between the number of pounds v an African elephant eats in days d.

Number of Days, d			
Pounds Eaten, v			

   c. Graph the ordered pairs. Analyze the graph.



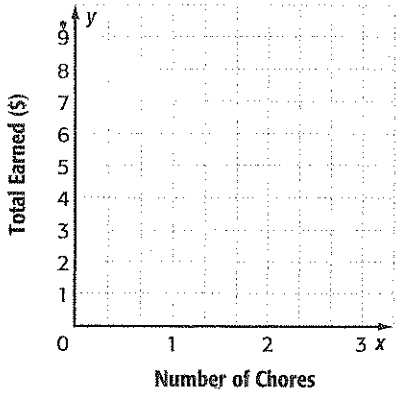
7. Maurice receives $3 per week for allowance and earns an additional $1.75 for each chore he completes.

a. Write an equation to find t, the total amount earned for c chores in one week.

b. Make a function table to show the relationship between the number of chores completed c and the total amount earned t in one week.

Number of Chores, c			
Total Earned ($), t			

c. Graph the ordered pairs.



d. How much will Maurice earn if he completes 5 chores in one week?

8. In a video game, each player earns 5 points for reaching the next level and 15 points for each coin collected.

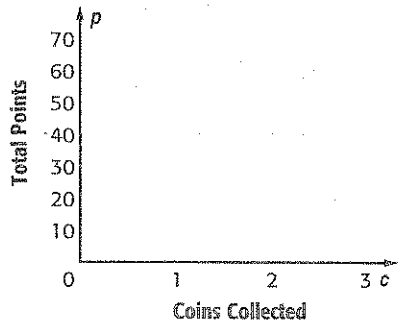
a. Write an equation to find p, the total points for collecting c coins after reaching the next level. $p = 5 + 15c$

Total points p equals 15 times the number of coins c collected plus 5 points for reaching the next level. So, the equation is $p = 5 + 15c$.

b. Make a table to show the relationship between the number of coins collected c and the total points p.

Number of Coins, c			
Total Points, p			

c. Graph the ordered pairs. Analyze the graph.



9. Two disc jockeys charge different rates. The Music Man charges $45 per hour and Road Tunes charges $35 per hour. Write equations to represent the total cost of hiring either disc jockey for any number of hours.