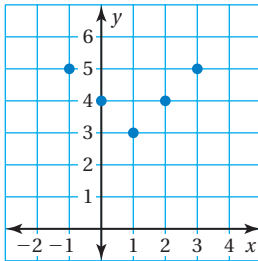


4 Chapter Test



1. Find the domain and range of the function represented by the graph.



2. Copy and complete the input-output table for the function $y = 7x - 3$. Then find the domain and range of the function represented by the table.

x	-1	0	1	2
y				

Graph the function. Is the domain of the graph discrete or continuous?

3.

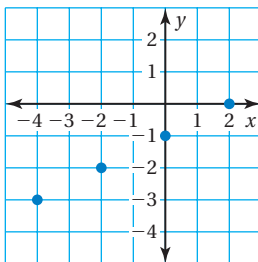
Hair Clips, x	Cost, y
0	0
1	1.5
2	3
3	4.5



4.

Minutes, x	Gallons, y
0	60
5	45
10	30
15	15

5. Write a linear function that relates y to x .



6. Does the table represent a *linear* or *nonlinear* function? Explain.

x	0	2	4	6
y	8	0	-8	-16

7. **SAVINGS** You save 15% of your monthly earnings x (in dollars).

- Write an equation in function form that represents the amount y (in dollars) you save each month.
- Create an input-output table for the equation in part (a). Use the inputs 25, 30, 35, and 40.
- What is the total amount saved during those 4 months?

8. **FOOD DRIVE** You are putting cans of food into boxes for a food drive. One box holds 30 cans of food. Write a linear function that represents the number y of cans of food that will fit in x boxes.

9. **SURFACE AREA** The table shows the surface area S (in square inches) of a cube with a side length of x feet. Does the table represent a linear or nonlinear function? Explain.

Side Length, x	1	2	3	4
Surface Area, S	6	24	54	96