

3.1

Practice Worksheet #2

In Exercises 1 and 2, find the domain and range. Then, determine whether the relation is a function. Explain.

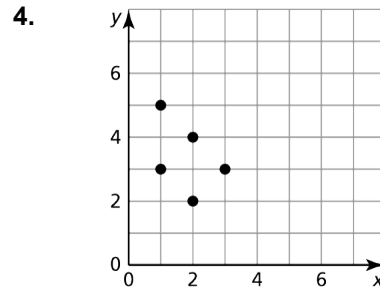
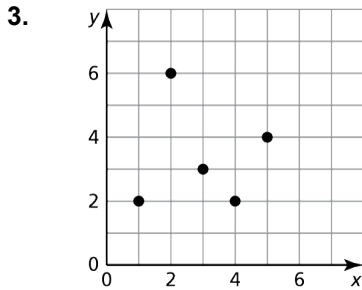
1.

Input, x	8	4	2	4	8
Output, y	-4	-2	0	2	4

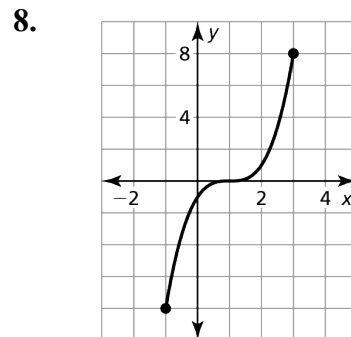
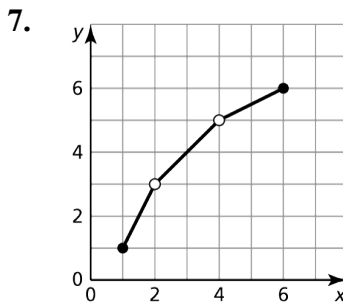
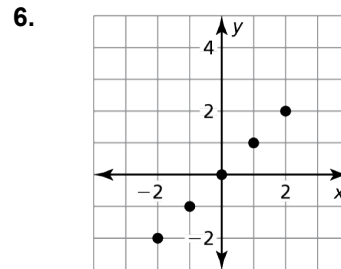
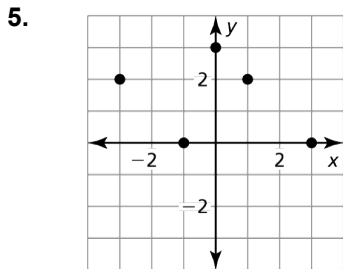
2.

Input, x	0	2	4	6	8
Output, y	3	7	11	15	19

In Exercises 3 and 4, find the domain and range. Then, determine whether the graph represents a function. Explain.



In Exercises 5 - 8, find the domain and range of the function represented by the graph.



9. The function $y = 7x + 35$ represents the monthly cost y (in dollars) of a group of x members joining the fitness club.

a. Identify the independent and dependent variables.

b. Your group has enough money for up to six members to join the fitness club. Make an input-output table for the given function.

c. Find the domain and range of the function.

In Exercises 10 and 11, determine whether the statement uses the word *function* in a way that is mathematically correct. Explain your reasoning.

10. A function pairs each teacher with 30 students.

11. The cost of mailing the package is a function of the weight of the package.