

Practice C

For use with pages 46–52

Does the table represent a function? Explain.

1.

Input	Output
12	10
14	12
16	10
18	12

2.

Input	Output
11	0
9	0
10	1
8	1

3.

Input	Output
1	1
2	2
4	3
4	4

Make an input-output table for the function. Use 0, 1, 2, and 3 as the domain.

4. $y = 4x + 3$

5. $y = 6x$

6. $y = 21 - x$

7. $y = x + 39$

8. $y = 2x + \frac{1}{4}$

9. $y = 20 - 4x$

Make an input-output table for the function. Use 2, 2.5, 3, 5.5, and 6 as the domain.

10. $y = 4x + 1.5$

11. $y = 24 - \frac{x}{0.5}$

12. $y = x^2 + 2.5$

Aerobics Class In Exercises 13–16, use the following information.

You join an aerobics class at the local gym. The cost is \$3.50 per class plus \$10 for the initial membership fee.

13. Write an equation that shows the relationship between the number of classes n you attend and the amount you pay p .
14. Evaluate the equation for $n = 1, 2, 6, 8,$ and 10 . Organize your results in an input-output table.
15. Draw a line graph to represent the data in the input-output table.
16. Describe the domain and range of the function.

21. **Writing** Give an example of a function that has many values in the domain and only one element in the range.
22. **Writing** Give an example of a function that has whole number values in the domain and real number values in the range.

Monarch Butterflies In Exercises 17–20, use the following information.

When the monarch butterfly is migrating to the south, it has an average speed of 80 miles per day.

17. Write an equation that shows the relationship between the number of days t and the distance (in miles) it has traveled d .
18. Evaluate the equation for $t = 2, 5, 8,$ and 10 . Organize your results in an input-output table.
19. Draw a line graph to represent the data in the input-output table.
20. **Extention:** If the monarch butterfly averaged 60 miles per day, how would the graph change?