

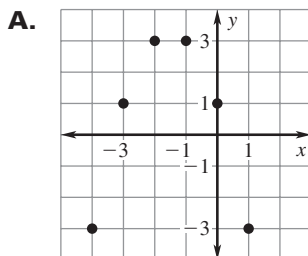
LESSON
10.8

Practice B

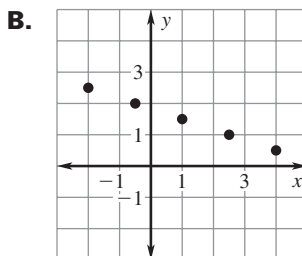
For use with pages 684–693

Match the function with the graph it represents.

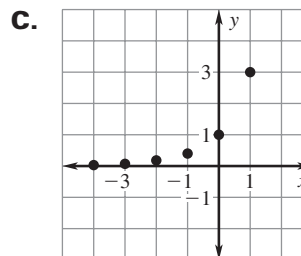
1. Linear function



2. Exponential function

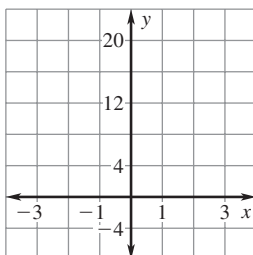


3. Quadratic function

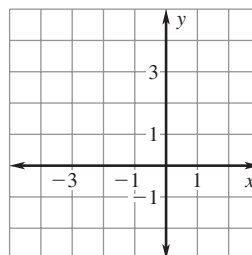


Use a graph to tell whether the ordered pairs represent a *linear function*, an *exponential function*, or a *quadratic function*.

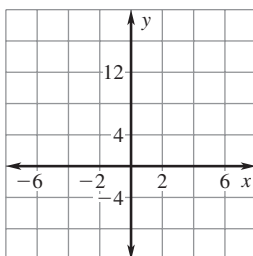
4. $(-2, 16), (-1, 8), (0, 4), (1, 2), (2, 1)$



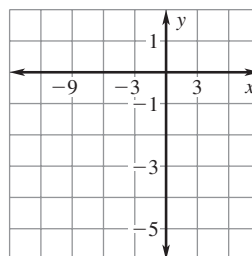
5. $(-3, 4), (-2, 0), (-1, -2), (0, -2), (1, 0)$



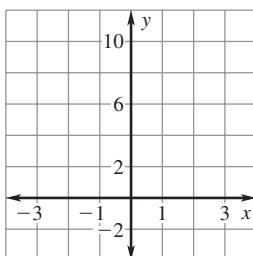
6. $(-4, 17), (-2, 11), (0, 5), (2, -1), (4, -7)$



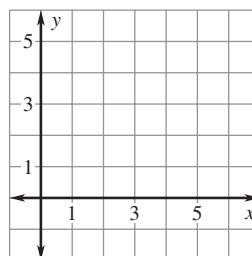
7. $(-9, -1), (-6, -2), (-3, -3), (0, -4), (3, -5)$



8. $(-2, \frac{1}{9}), (-1, \frac{1}{3}), (0, 1), (1, 3), (2, 9)$



9. $(2, 5), (3, 2), (4, 1), (5, 2), (6, 5)$



LESSON
10.8**Practice B** *continued*
For use with pages 684–693

Tell whether the table of values represents a *linear function*, an *exponential function*, or a *quadratic function*.

10.

x	0	1	2	3	4
y	1	5	25	125	625

11.

x	-2	-1	0	1	2
y	-10	-7	-4	-1	2

12.

x	-1	0	1	2	3
y	4	1	0	1	4

13.

x	-10	-5	0	5	10
y	4	3.5	3	2.5	2

14.

x	-2	-1	0	1	2
y	32	8	2	$\frac{1}{2}$	$\frac{1}{8}$

15.

x	-4	-3	-2	-1	0
y	-3	0	1	0	-3

16.

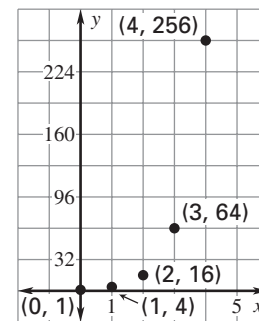
x	-2	-1	0	1	2
y	1	3	5	7	9

17.

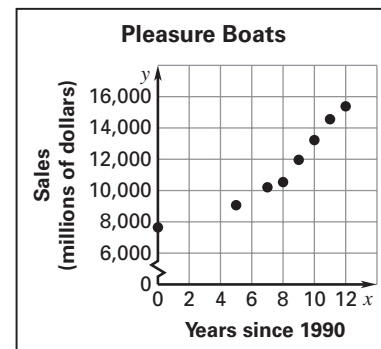
x	-3	-2	-1	0	1
y	27	9	3	1	$\frac{1}{3}$

18. Use the graph shown.

- Which function does the graph represent, an *exponential function* or a *quadratic function*? Explain your reasoning.
- Make a table of values for the points on the graph. Then use differences or ratios to check your answer in part (a).
- Write an equation for the function that the table of values from part (b) represents.



- Pleasure Boats** The graph shows total amount of sales (in millions of dollars) of pleasure boats in the United States for the period 1990–2002. Tell whether the data should be modeled by a *linear function*, an *exponential function*, or a *quadratic function*. Explain your reasoning.
- Computer Value** The value V of a computer between 1999 and 2003 is given in the table. Tell whether the data should be modeled by a *linear function*, an *exponential function*, or a *quadratic function*. Then write an equation for the function.



Years since 1999, t	0	1	2	3	4
Value, V (dollars)	800	725	650	575	500