

LESSON **Practice A**
9-6 **Modeling Real-World Data**

Determine which parent function would best model the given data set.
 Choose among linear, quadratic, exponential, and square root.

1. a. Look at the table at right. Are the data for one variable evenly spaced?

- b. Look at the data for the other variable. Which differences, if any, are constant?

- c. Which parent function best models the data?

x	y
5	1
8	2
13	3
20	4
29	5
40	6

2.

x	y
2	84
4	72
6	52
8	24
10	-12
12	-56

3.

x	y
8	-26
16	-2
24	22
32	46
40	70

4.

x	y
1	-2
2	4
3	-8
4	16
5	-32
6	64

Write a function that models the given data.

5. Use a graphing calculator to make a scatter plot. Then use the regression feature to find the function that best represents the data.

x	-2	0	2	4	6
y	8	10	8	2	-8

Solve.

6. The table shows the number of sport utility vehicles sold in the United States from 1997 to 2003. Write a function that models the data.

Years after 1996	1	2	3	4	5	6	7
SUVs (millions)	2.3	2.8	3.1	3.2	3.8	4.0	4.3
