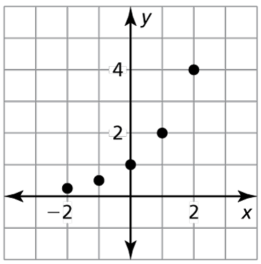
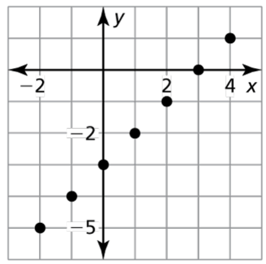
Name ____ Date __________

8.6 Practice A

In Exercises 1 and 2, tell whether the points appear to represent a *linear*, an *exponential*, or a *quadratic* function.

1. 

2. 

In Exercises 3–6, plot the points. Tell whether the points appear to represent a *linear*, an *exponential*, or a *quadratic* function.

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

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

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

6. $\left(-2, \frac{1}{9}\right), \left(-1, \frac{1}{3}\right), (0, 1), (1, 3), (2, 9)$

7. The table shows the demand for a certain commodity (measured in thousands), where x is the number of the month of the year.

Number of month, *x*	1	2	3	4	5	6
Demand, *y*	5	2	1	2	5	10

a. During what month is the demand at a minimum?

b. Plot the points. Let x be the independent variable. Then determine the type of function that best represents this situation.

c. Write a function in standard form that models the data.

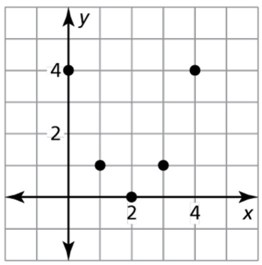
d. Use the function from part (c) to find the demand for the commodity (measured in thousands) during August.

Name____ Date__________

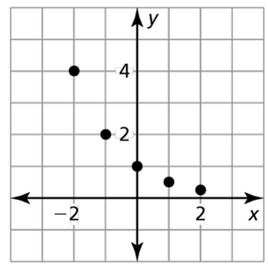
8.6 Practice B

In Exercises 1 and 2, tell whether the points appear to represent a *linear*, an *exponential*, or a *quadratic* function.

1.



2.



In Exercises 3–6, plot the points. Tell whether the points appear to represent a *linear*, an *exponential*, or a *quadratic* function.

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

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

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

6. $(-3, -2), (-2, -1), (-1, 0), (0, 1), (1, 2)$

In Exercises 7–10, tell whether the table of values represents a *linear*, an *exponential*, or a *quadratic* function.

7.

x	−3	−2	−1	0	1	2
y	0.9	0.4	0.1	0	0.1	0.4

8.

x	1	2	3	4	5	6
y	1	−1	−3	−5	−7	−9

9.

x	1	2	3	4	5	6
y	9	4	1	0	1	4

10.

x	−1	0	1	2	3
y	6	3	$\frac{3}{2}$	$\frac{3}{4}$	$\frac{3}{8}$

11. Write a function that has constant second differences of 4.