

## ALGEBRA II

### Practice Problems for 5.1-5.2

Name \_\_\_\_\_

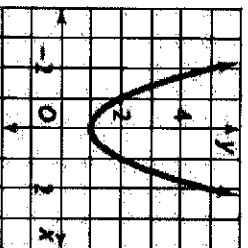
#### OPTIONAL REVIEW FOR QUIZ 5.1-5.2 Come in Wed Access for answers.

Find a quadratic model the set of values using a system of equations.

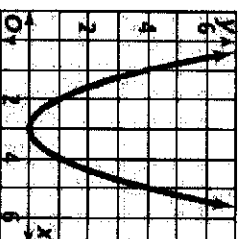
1.  $(-4, 8), (-1, 5), (1, 13)$

Identify the vertex and the axis of symmetry of each parabola.

2.



3.



Determine whether each function is linear or quadratic. Identify the  $a$ ,  $b$ , and  $c$  values.

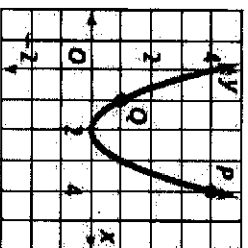
4.  $y = 3(x + 5)^2$

5.  $y = 5x(x - 5) - 5x^2$

6.  $y = 3x(x - 1) - (3x + 7)$

For the parabola below, identify points corresponding to P and Q.

7.



State whether the function has a maximum or a minimum and find its coordinates.

8.  $y = -x^2 + 2x + 3$

9.  $y = 2x^2 + 4x - 3$

10.  $y = 5x^2 - 3$

Graph each function by hand with a minimum of 5 points Label the vertex and the axis of symmetry.