

Name: \_\_\_\_\_ Date: \_\_\_\_\_

### Graphing a Parabola from Vertex Form Worksheet

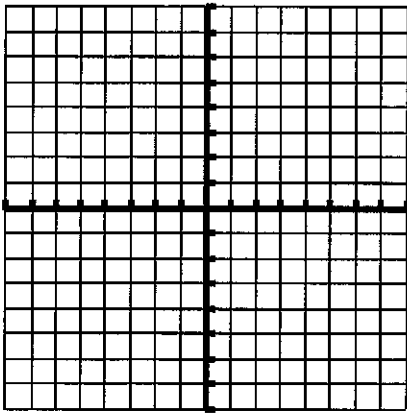
Graph each function.

1.  $y = (x-1)^2 + 2$

Vertex = \_\_\_\_\_

A.O.S. = \_\_\_\_\_

Is the vertex a max or min?

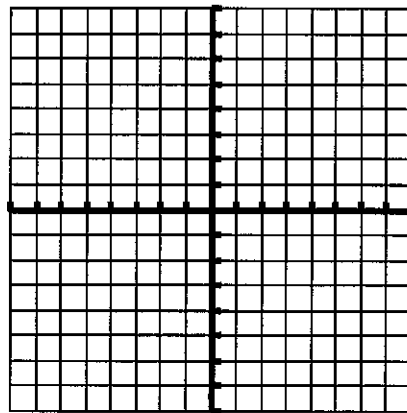


2.  $y = 2(x-2)^2 + 5$

Vertex = \_\_\_\_\_

A.O.S. = \_\_\_\_\_

Is the vertex a max or min?

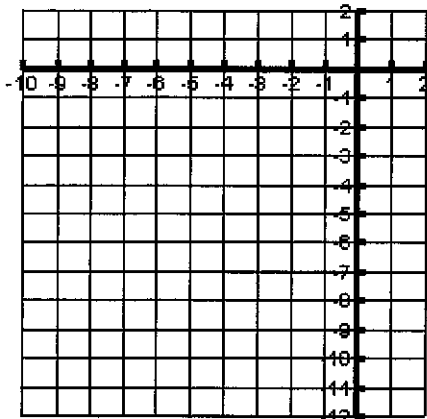


3.  $y = -3(x+7)^2 - 8$

Vertex = \_\_\_\_\_

A.O.S. = \_\_\_\_\_

Is the vertex a max or min?

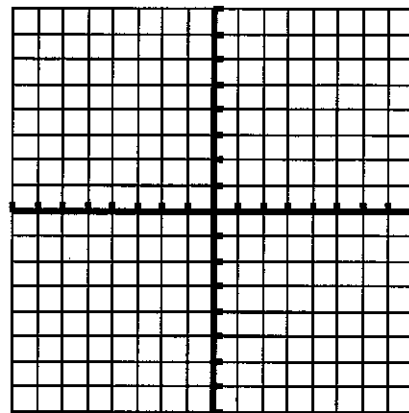


4.  $y = (x-5)^2 - 3$

Vertex = \_\_\_\_\_

A.O.S. = \_\_\_\_\_

Is the vertex a max or min?

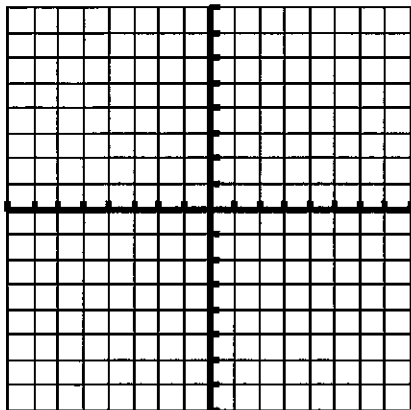


5.  $y = -(x-1)^2 + 4$

Vertex = \_\_\_\_\_

A.O.S. = \_\_\_\_\_

Is the vertex a max or min?

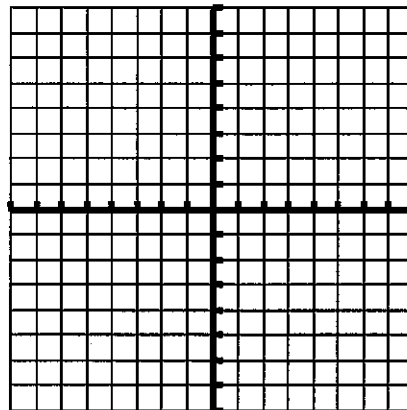


6.  $y = 2(x+1)^2$

Vertex = \_\_\_\_\_

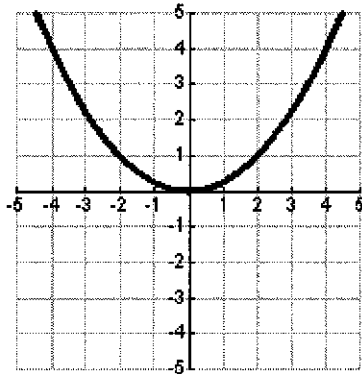
A.O.S. = \_\_\_\_\_

Is the vertex a max or min?

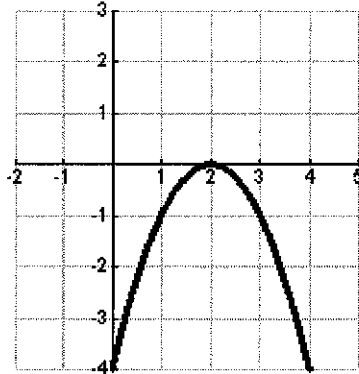


Write the equation of each parabola in vertex form.

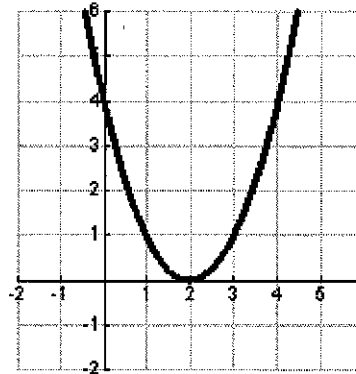
7. \_\_\_\_\_



8. \_\_\_\_\_



9. \_\_\_\_\_



Write the equation of each parabola in vertex form.

10. vertex (1,2), point (2,-5)

11. Vertex (-3,6), point (1,-2)

12. vertex (-1,-4), y-intercept: 3

13. Vertex  $\left(\frac{1}{10}, -\frac{9}{10}\right)$ , y-intercept: -1

CLASSWORK  
DAY 10  
COMPLETE THE  
SQUARE

Lesson 5.5

Find the vertex using any method.

1.  $f(x) = x^2 - 2x - 8$

2.  $f(x) = x^2 + 4x - 4$

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

4.  $f(x) = x^2 + 4x + 10$

5.  $f(x) = 2x^2 - 12x + 6$

6.  $f(x) = x^2 + 3x - 18$

7.  $f(x) = x^2 - 4x + 8$

8.  $f(x) = 2x^2 - 12x + 16$

9.  $f(x) = 3x^2 + 9x + 3$

10.  $f(x) = x^2 - x + 5$

11.  $f(x) = 3x^2 + 9x + 6$

12.  $f(x) = x^2 - 4x + 4$

13.  $f(x) = x^2 + 8x - 4$

14.  $f(x) = x^2 + 2x - 1$

15.  $f(x) = x^2 + 6x + 3$

16.  $f(x) = -2x^2 + 8x - 4$

17.  $f(x) = x^2 - 6x + 7$

18.  $f(x) = x^2 + 2x + 3$

