Name_____ Date_____ Period_____

GRAPHING QUADRATICS IN VERTEX FORM WORKSHEET #1

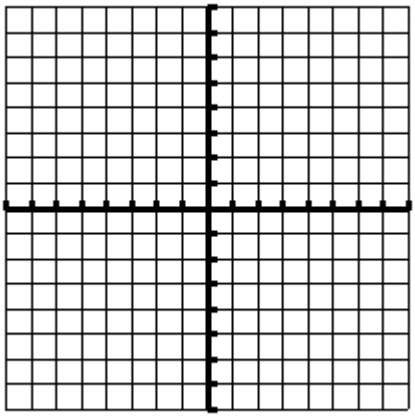
Graph each quadratic equation.

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

Vertex : _____

Axis:_____

Is the vertex a max or min?

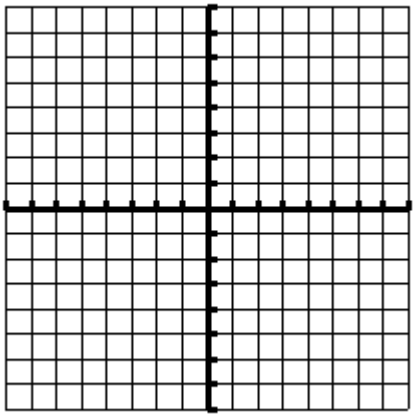


2. $y = 2(x-2)^2 + 5$

Vertex : _____

Axis: _____

Is the vertex a max or min?

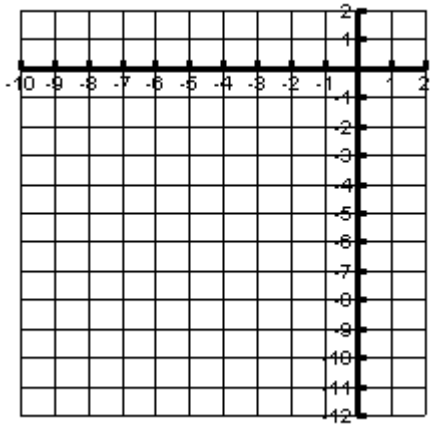


3. $y = -3(x+7)^2 - 8$

Vertex: _____

Axis: _____

Is the vertex a max or min?

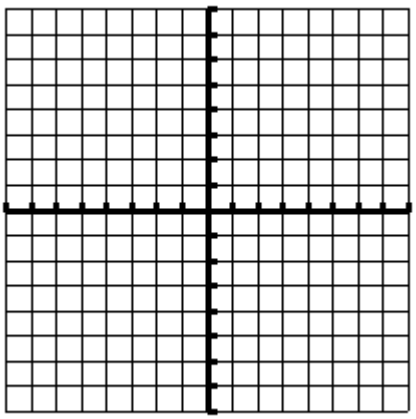


4. $y = (x-5)^2 - 3$

Vertex: _____

Axis: _____

Is the vertex a max or min?

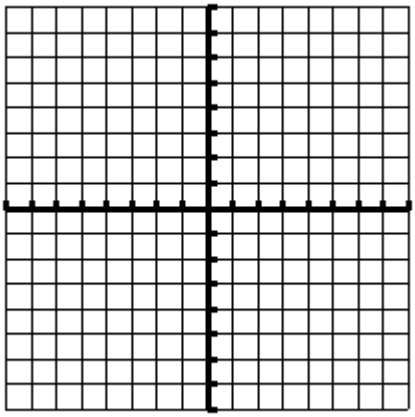


5. $y = -(x-1)^2 + 4$

Vertex = _____

A.O.S. = _____

Is the vertex a max or min?

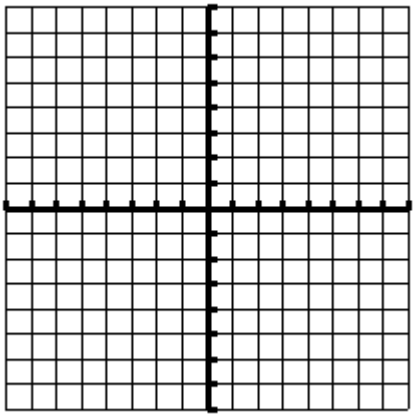


6. $y = 2(x+1)^2$

Vertex = _____

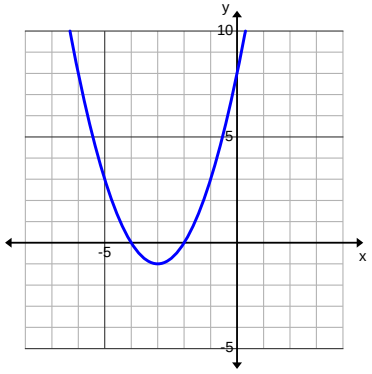
A.O.S. = _____

Is the vertex a max or min?

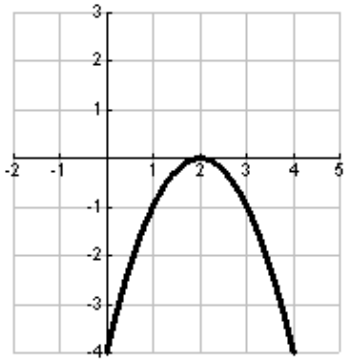


Write the equation of each parabola in vertex form.

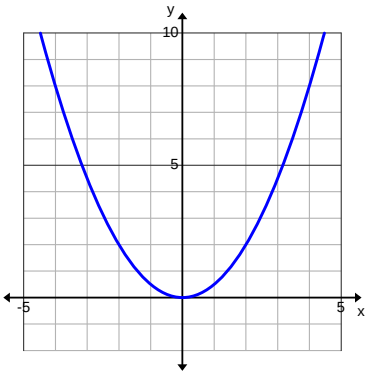
7. _____



8. _____



9. _____



10. A football is kicked into the air. It's height in meters after *t* seconds is given by $h = -4.9(t-2.4)^2 + 29$.

a) What was the height of the football when it was kicked?

b) What was the maximum height of the ball? At what time was the maximum height reached?

c) How high was the ball after 2 seconds?

d) Was the ball still in the air after 5 seconds?