ALGBERA II: **4.1 QUADRATIC FUNCTIONS AND EQUATIONS** **WORKSHEET 9**

1. What is the parent quadratic function?

2. What is the standard form of a quadratic?

3. What is the vertex form of a quadratic?

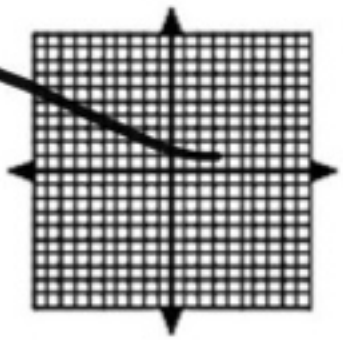
4. What is the intercept form of a quadratic?

5. Write the equation in standard form:
$y = -\frac{1}{2}(x-4)^2 + 3$

6. Write the equation in standard form:
$y = -3(x-5)(2x+1)$

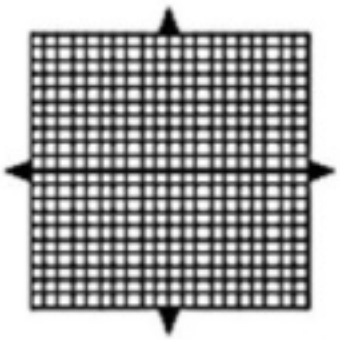
7. $y = 3(x-5)^2 - 8$

Form:
Vertex:
Open Up or Down:
Axis of Symmetry:
Max or Min Value:
Pattern:
Y-Intercept:
Transformation:
Domain:
Range:



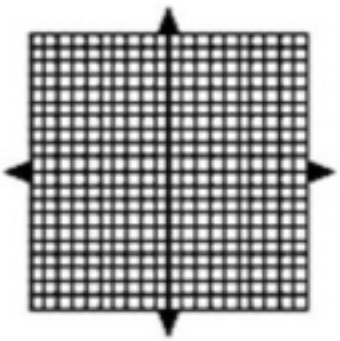
8. $y = 2x^2 - 8x - 4$

Form:
Vertex:
Open Up or Down:
Axis of Symmetry:
Max or Min Value:
Pattern:
Y-Intercept:
Transformation:
Domain:
Range:



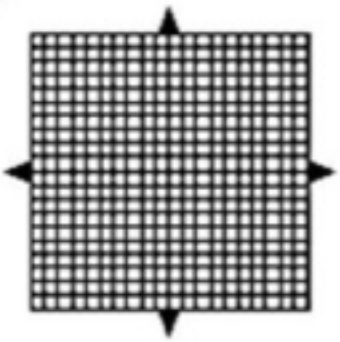
9. $f(x) = -6x^2 + 2$

Form:
Vertex:
Open Up or Down:
Axis of Symmetry:
Max or Min Value:
Pattern:
Y-Intercept:
Transformation:
Domain:
Range:



10. $y = -(x+3)(x-1)$

Form:
Vertex:
Open Up or Down:
Axis of Symmetry:
Max or Min Value:
Pattern:
Y-Intercept:
Transfromation:
Domain:
Range:



11. Write the equation of the parabola that has been shifted 3 units right, 2 units down, is vertically compressed by a factor of ¾ and is reflected over the x-axis.