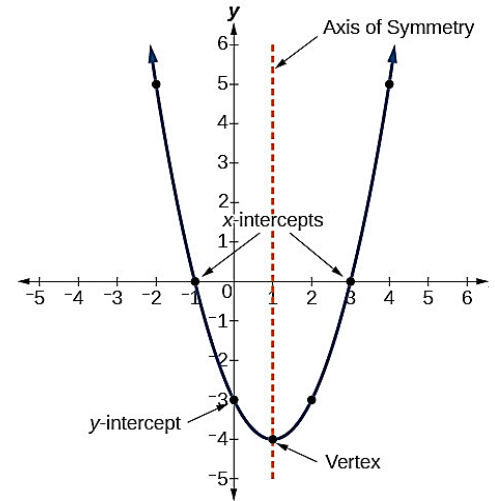


Algebra 1: Guided Notes
Parts of a Quadratic Graph

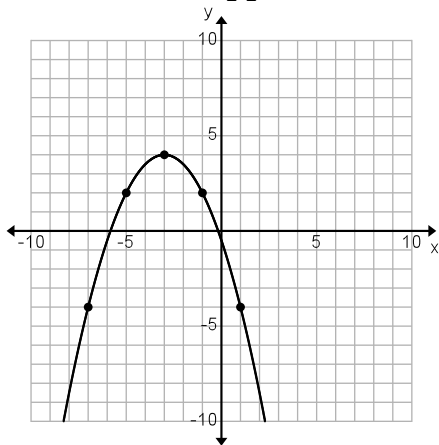
Name _____ Period _____

1. A function where the highest exponent is squared is called a _____ function.
2. A line that passes through the graph in such a way that each side is a mirror reflection of the other side is called the _____.
3. The points (or point) where the graph crosses the x-axis are called the _____ intercepts or _____.
4. The point where the graph crosses the y-axis is called the _____ intercept.
5. The _____ is the highest or lowest point of your graph. It is also called the absolute _____ or _____ for a quadratic function.
6. When a parabola opens upward, the y-value of the vertex is the _____ value.
7. When a parabola opens downward the y-value of the vertex is the _____ value.
8. The axis of symmetry for the graph in the upper right corner is _____ because it is a vertical line and crosses x-axis at (1, 0).

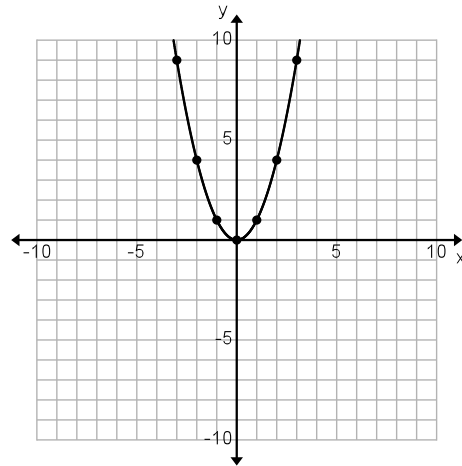


For each of the following, draw the axis of symmetry for the graph and fill in the information. Some values will be approximate!

9.



10.



Axis of symmetry: _____ Vertex: _____

Is the vertex a max or min?

x-intercepts (zeros): _____

y-intercepts: _____

Domain: _____

Range: _____

Axis of symmetry: _____ Vertex: _____

Is the vertex a max or min?

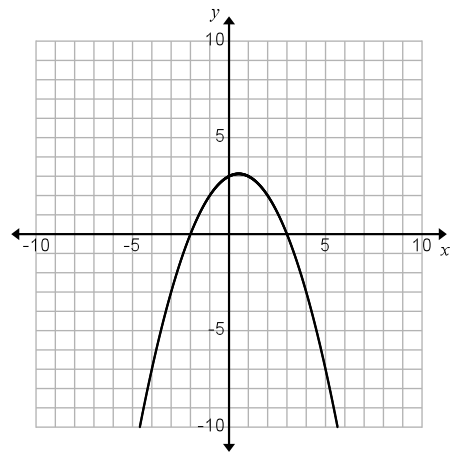
x-intercepts (zeros): _____

y-intercepts: _____

Domain: _____

Range: _____

11.



Axis of symmetry: Vertex:

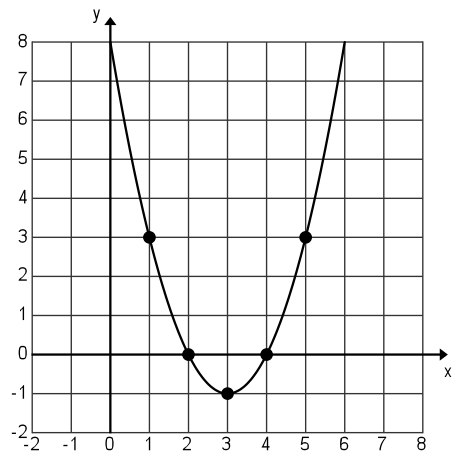
Is the vertex a max or min?

x-intercepts (zeros):

y-intercepts:

Domain: Range:

12.



Axis of symmetry: Vertex:

Is the vertex a max or min?

x-intercepts (zeros):

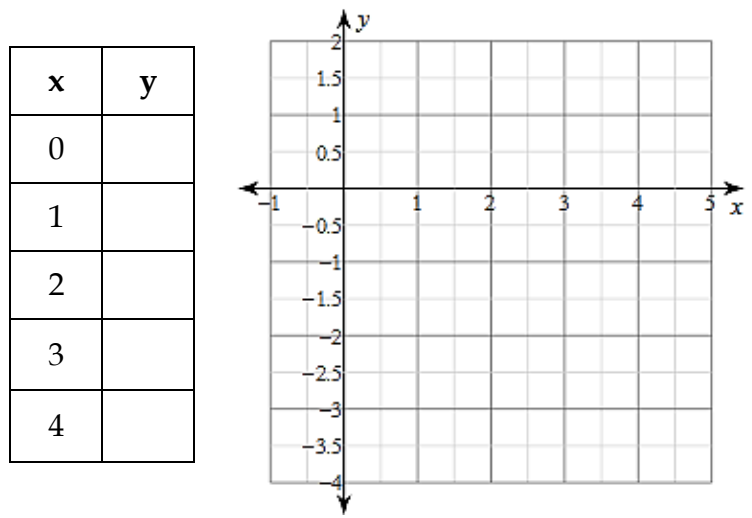
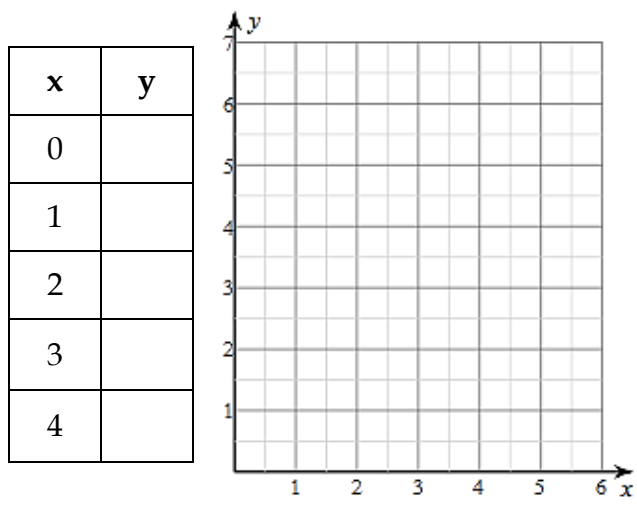
y-intercepts:

Domain: Range:

For the following, complete the table of values. Then graph and fill in the information below.

13. $y = x^2 - 4x + 6$

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



Axis of symmetry: Vertex:

Is the vertex a max or min?

x-intercepts (zeros):

y-intercepts:

Domain: Range:

Axis of symmetry: Vertex:

Is the vertex a max or min?

x-intercepts (zeros):

y-intercepts:

Domain: Range: