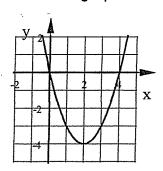
Algebra 1

- 1. What is the the equation for a Quadratic Function in Standard Form?
- 2. What do we call the graph of a Quadratic Function?
- 3. What is the Vertex of a parabola?
- 4. a) What is the Axis of Symmetry (also called Line of Symmetry) of a parabola?
- b) What kind of line is the Line of Symmetry (LOS)?
- c) What does the equation for the LOS always look like?
- c) Where is the LOS located on every parabola?
- 5. What must be true about the equation of a parabola for the graph to open up?
- 6. What must be true about the equation of a parabola for the graph to open down?
- 7. When is the vertex of a parabola called a Minimum?
- 8. When is the vertex of a parabola called a Maximum?
- 9. Use the graph below. State the coordinates of the vertex and the equation of the LOS:



Coord of Vertex:

Eq of LOS:

- 10. If the vertex of a parabola is the point (-13,8) write the equation of the LOS.
- 11. If the axis of symmetry of the parabola  $y = -2x^2 + 24x + 11$  is x = 6 find the coordinates of the Vertex.