Graph the quadratic function using a table of values. Identify the axis of symmetry and the vertex of the parabola. Then identify the domain and range.

1. \( y = -x^2 + 2 \)
   - Axis: 
   - Vertex: 
   - Domain: 
   - Range: 

2. \( y = x^2 - 4x - 12 \)
   - Axis: 
   - Vertex: 
   - Domain: 
   - Range: 

3. \( y = 2x^2 - 8x + 9 \)
   - Axis: 
   - Vertex: 
   - Domain: 
   - Range: 

4. \( y = -3x^2 \)
   - Axis: 
   - Vertex: 
   - Domain: 
   - Range:
Graph the function and compare to the parent function, $y = x^2$, which is already graphed.

5. $y = -x^2 + 4$

Axis:

Vertex:

<table>
<thead>
<tr>
<th>x</th>
<th>y</th>
</tr>
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</table>

Compare:

6. $y = x^2 - 6x + 11$

Axis:

Vertex:

<table>
<thead>
<tr>
<th>x</th>
<th>y</th>
</tr>
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</table>

Compare:

7. Identify the **axis of symmetry** and the **vertex** for the function: $y = x^2 - x - 12$.

Axis of Symmetry:

Vertex:

8. Without graphing, describe how the graph of $y = -200x^2 - 530$ compares to the parent function, $y = x^2$. 