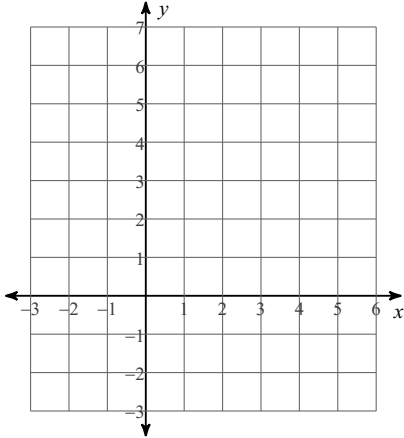


Quadratic Test

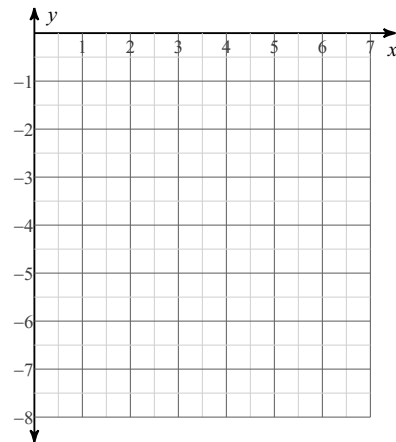
Date _____ Period _____

Sketch the graph of each function. Identify the vertex, axis of symmetry, min. or max., x and y intercepts, increasing & decreasing intervals, end behavior and domain and range.

1) $y = 2x^2 - 16x + 30$



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



Solve each equation by taking square roots.

3) $7n^2 - 6 = 561$

4) $2v^2 - 6 = -34$

Solve each equation by factoring.

5) $8p^2 + 15p = -7$

6) $3k^2 - 14k = -8$

Solve the equation using the quadratic formula. If necessary, round to the nearest one hundredth.

7) $2a^2 - 11a = 7$

Solve the equation by completing the square.

8) $3p^2 - 18p + 15 = -9$

Solve each equation using the method of your choice.

9) $4x^2 - 40 = -12x$

10) $n^2 = 8n - 16$

Write the equation in vertex form.

11) $6n^2 - 12n - 18 = 0$

12) $x^2 - 16x - 80 = 0$

- 13) If a rectangle has an area of 60 feet squared and dimensions, in feet, of x and $x + 1$. Find each dimension of the rectangle to the nearest hundredth of a foot.