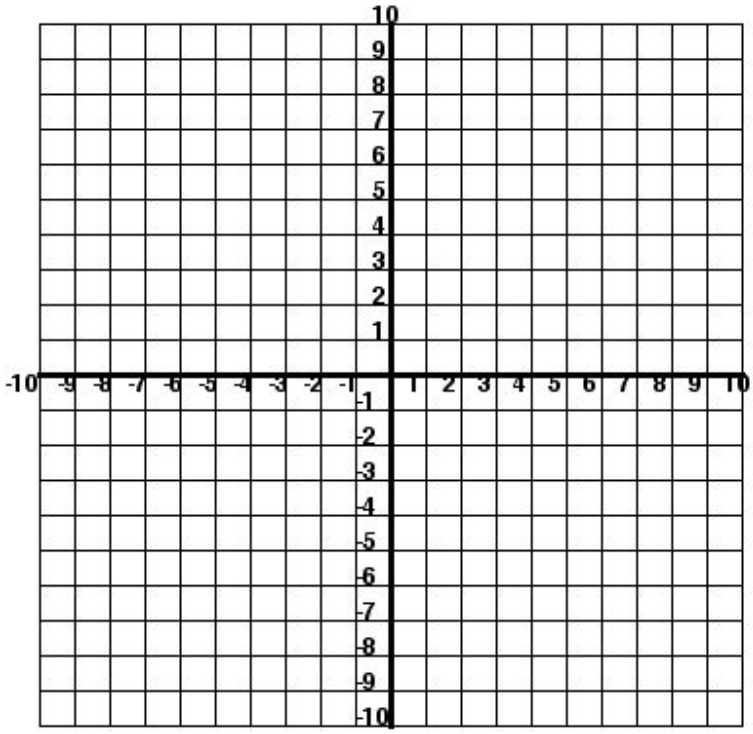
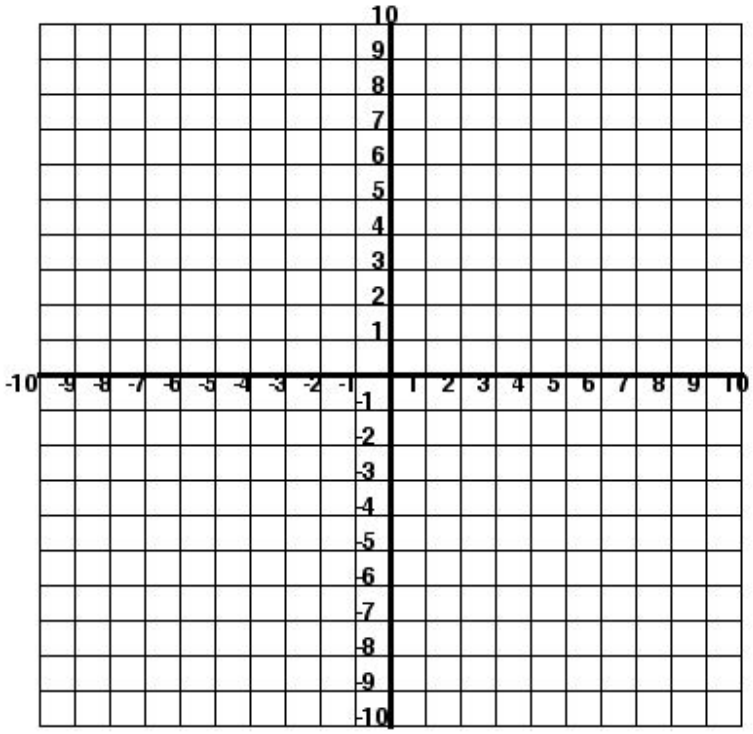
Alg1H Quadratics Test Review 2019 Name:_____

Graph each function. ***State and label*** the axis of symmetry, the coordinates of the vertex, and 2 other points. Show all work in a neat, organized manner. You must have at least 5 points, including the vertex.

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



2. $y = -2x^2 + 12x - 19$



**** one question on your test will ask you to write out the quadratic formula (for easy points!!) ****

Solve each quadratic equation by taking square roots. Show all work. Make sure your answer is completely simplified. Circle your final answer(s).

3.) $6x^2 + 9 = 33$

4.) $36x^2 - 7 = 93$

5.) $5x^2 + 3 = 43$

Solve each quadratic equation by factoring. Show all work. Make sure your answer is completely simplified. Circle your final answer(s).

6.) $x^2 + 4x - 32 = 0$

7.) $14x^2 - 16x = 0$

8.) $5x^2 - 3x - 2 = 0$

Solve each quadratic equation by completing the square. Show all work. Make sure your answer is completely simplified. Circle your final answer(s).

9.) $x^2 + 10x - 3 = 0$

10.) $x^2 - 20x + 91 = 0$

Solve each quadratic equation by using the quadratic formula. Show all work. Make sure your answer is completely simplified. Circle your final answer(s).

11.) $3x^2 + x - 4 = 0$

12.) $3x^2 - 6x - 5 = 0$