Algebra 2

Name_____

HW Graphing Quadratics (standard form)

Find the discriminant of each quadratic equation then state the number and type of solutions.
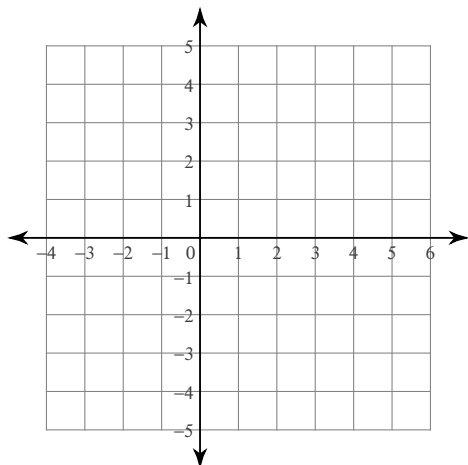
1) $9x^2 + 4x + 7 = 0$
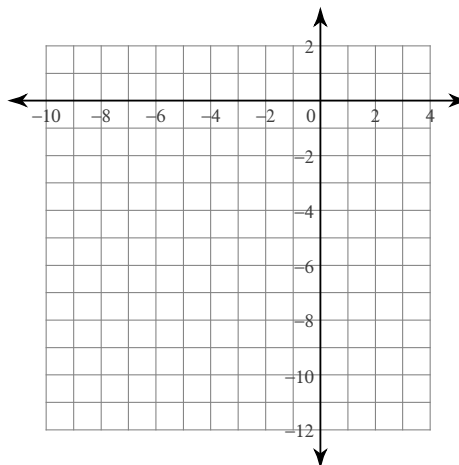
2) $3n^2 + 4n - 4 = 0$

3) $-8x^2 - 3x - 9 = 0$

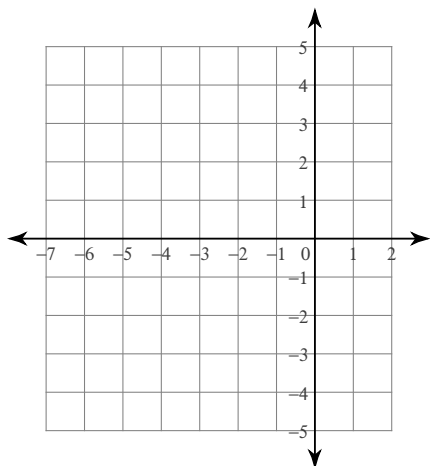4) $6a^2 - a - 1 = 0$

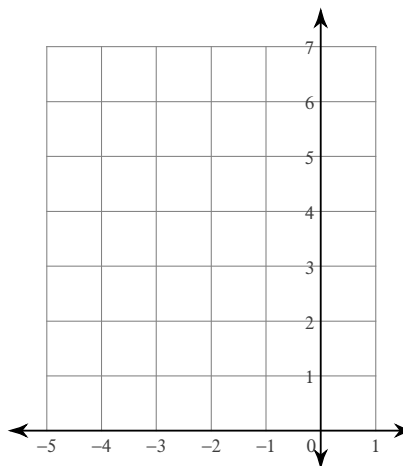**Sketch the graph of each function.**
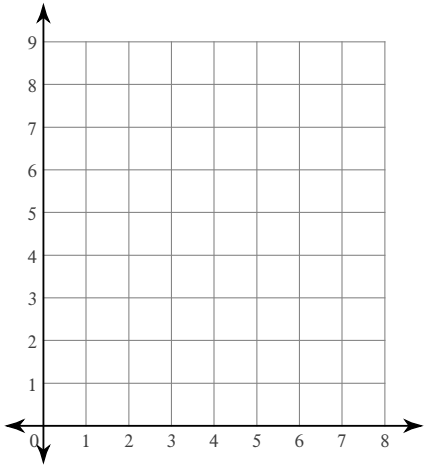
5) $y = 2x^2 + 4x - 2$
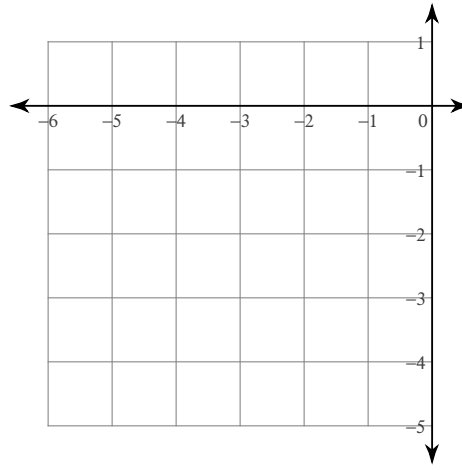

6) $y = -3x^2 + 12x - 11$
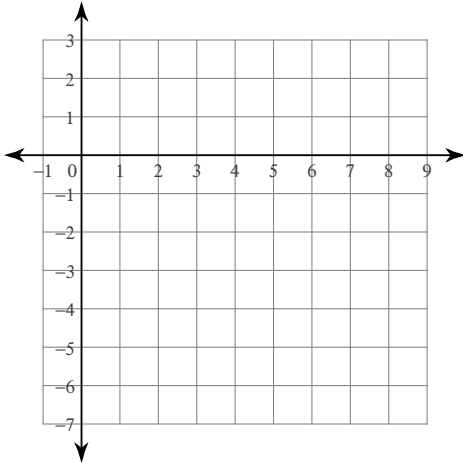

7) $y = -2x^2 - 16x - 28$
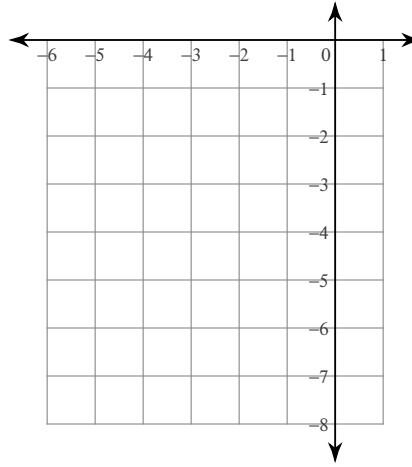

8) $y = x^2 + 4x + 6$
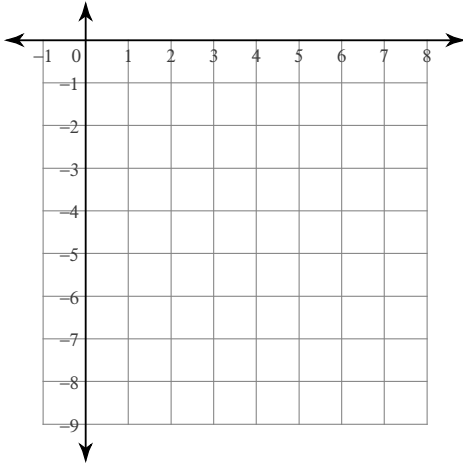
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9) $y = x^2 - 6x + 13$
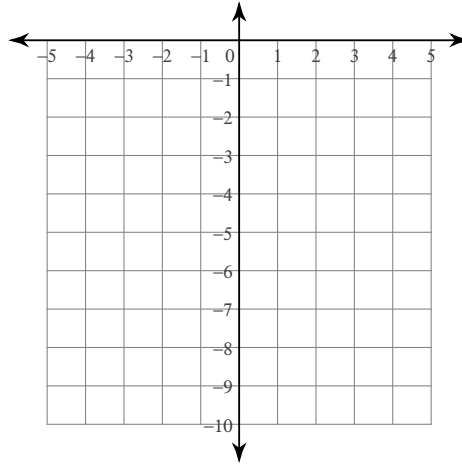
10) $y = x^2 + 4x$

11) $y = -2x^2 + 8x - 6$

12) $y = -x^2 - 8x - 19$

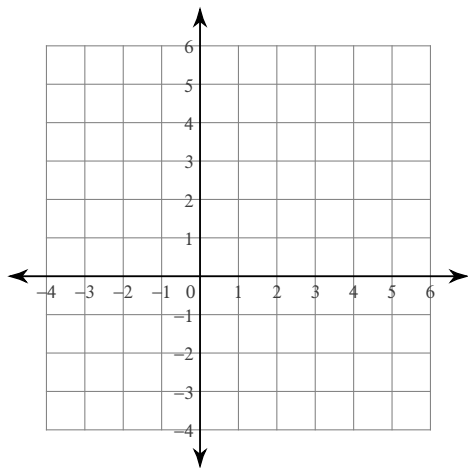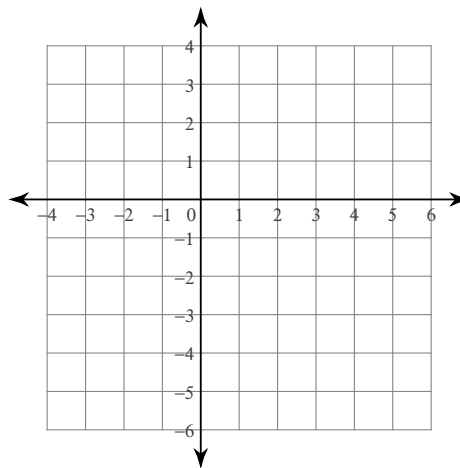13) $y = -x^2 + 8x - 20$
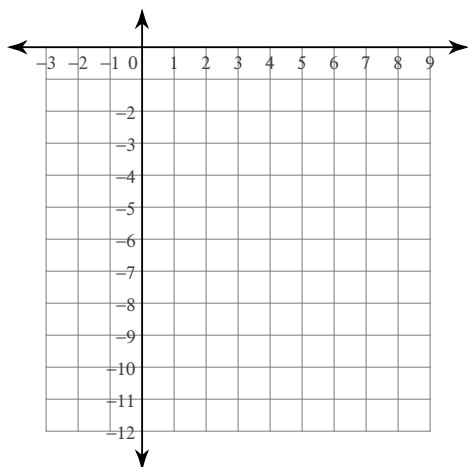
14) $y = -2x^2 + 8x - 9$

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15) $y = 2x^2 - 4x - 1$

16) $y = -2x^2 + 12x - 15$

17) $y = -2x^2 + 12x - 21$

18) $y = x^2 - 6x + 5$