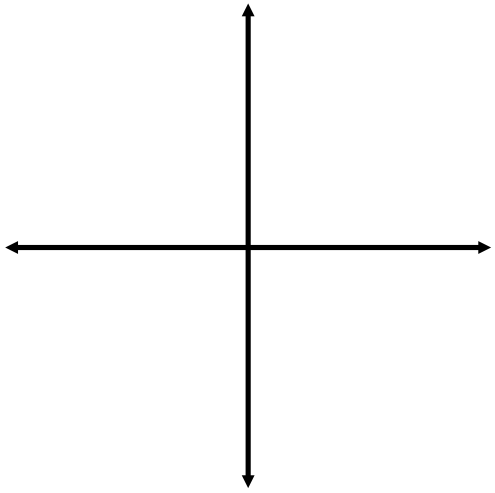
Name: _____

Graphing Quadratics Using the Quadratic Formula

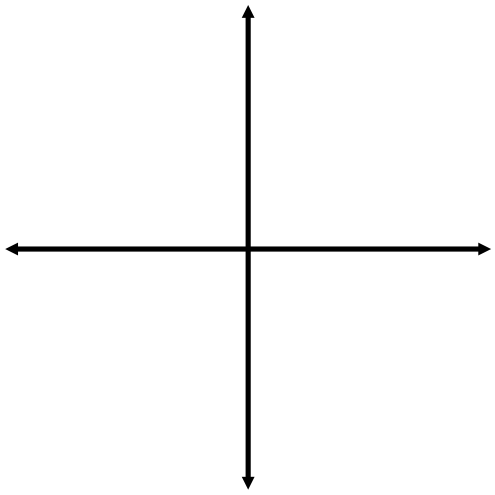
$$\boldsymbol{x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}}$$

Determine the details of each quadratic, using the QUADRATIC FORMULA. Then use them to graph the parabola. Remember to label the x-axis and y-axis, as well as your units of measure.

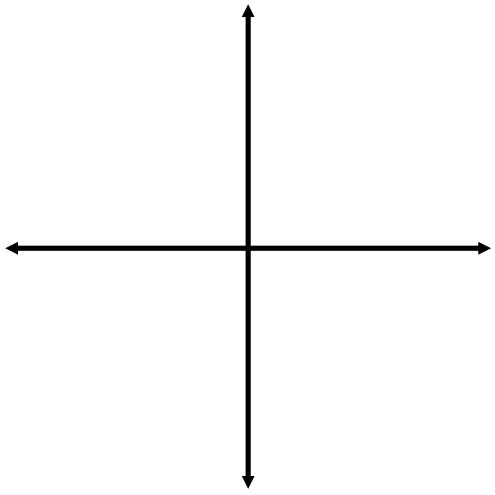
1. $f(x) = x^2 - 2x - 15$



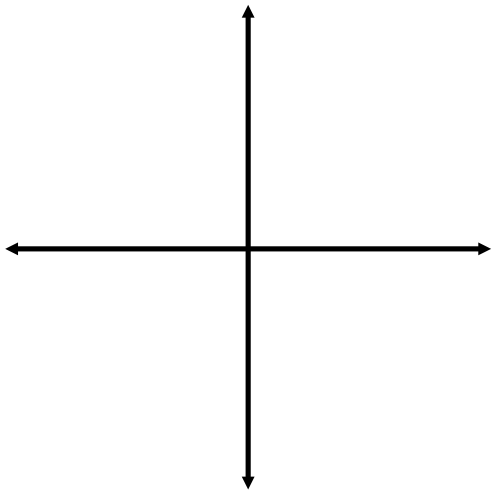
2. $f(x) = x^2 - 4x - 71$



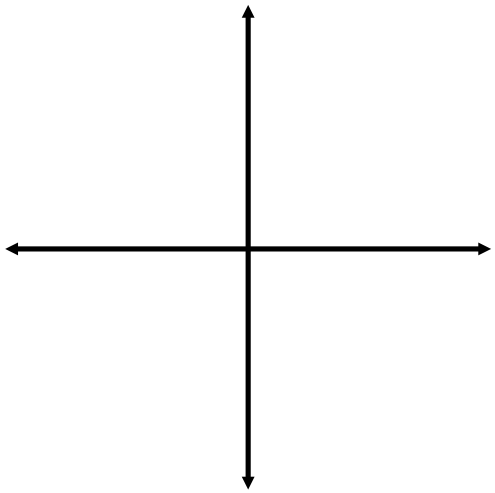
3. $f(x) = x^2 + 6x + 9$



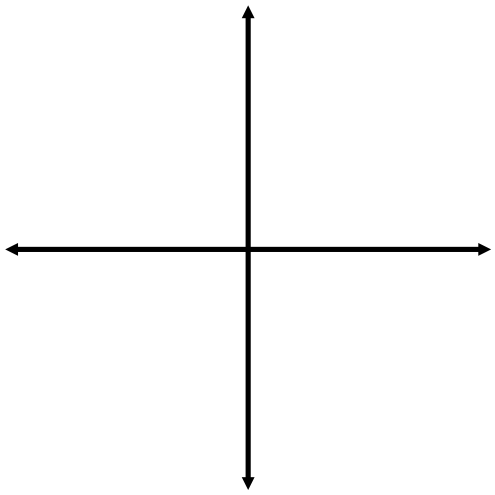
4. $f(x) = 9x^2 - 12x + 4$



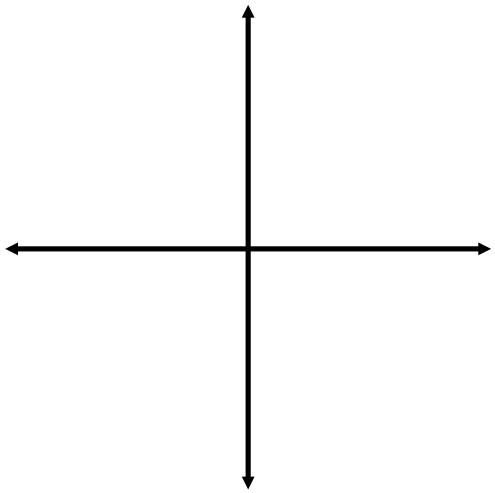
5. $f(x) = -2x^2 + 12x - 26$



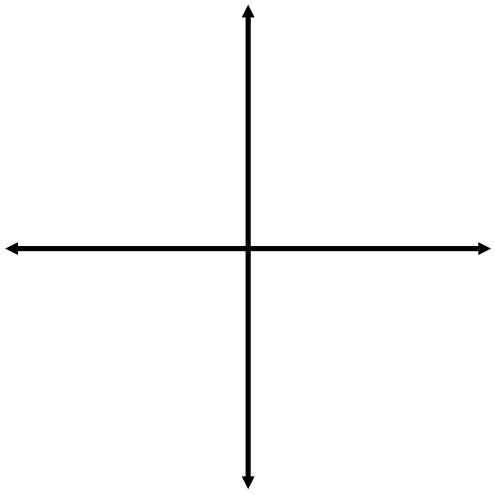
6. $f(x) = -x^2 + 8x + 20$



7. $f(x) = 5x^2 - 20x + 20$

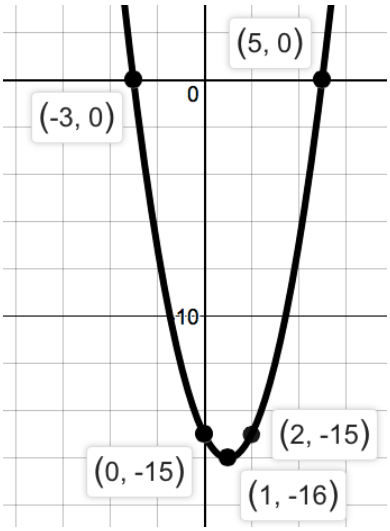


8. $f(x) = 4x^2 + 8x + 13$



Answers

1.



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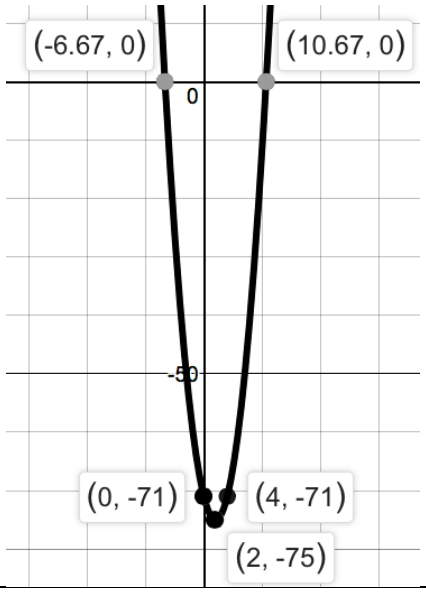

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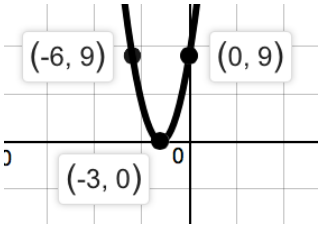

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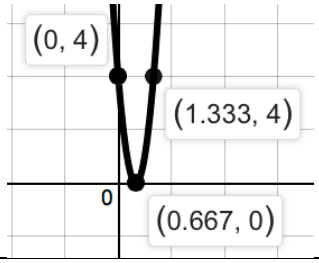

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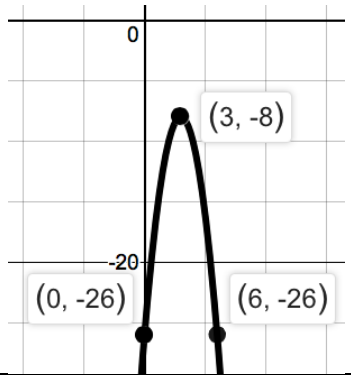

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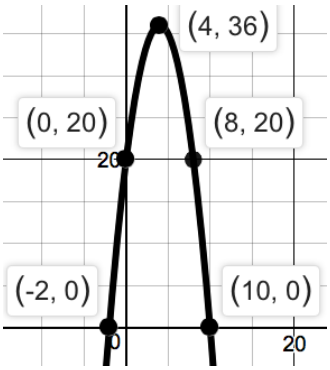
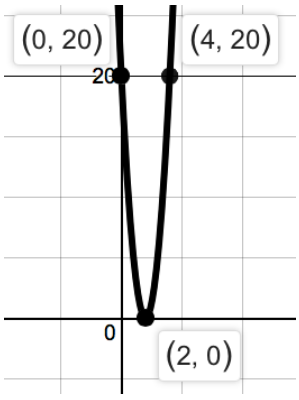


7.



8.