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| 1. Graphing and Quadratic Forms
 | 1. Solving, x-intercepts, zeros, or roots
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| * Standard to Vertex – Complete the square
* Standard to Intercept – Factor
* Vertex to Standard – FOIL + Simplify
* Intercept to Standard – FOILhttp://images.tutorvista.com/cms/images/67/quadratic-graph2.png
 | * Factor -> Separate -> Solve
* Complete the square using a magical *c* value of and then adding/subtracting to make your magic c value.
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| 1. Factoring
* GCF then Tic-Tac-Toe and factors to .
* GCF and Difference of Squares and factors to
 | 1. Radicals
 |
| 1. Imaginary Numbers
 | 1. Writing Quadratic Equations
 |
| * Adding/Subtracting – Just like *x*’s
* –Change and FOIL =
 | * For vertex form use
* For Intercept form use
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| 1. Word Problem #1
 | 1. Word Problem #2
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| The dimensions of the old stage at the concert hall were 30 feet wide and 15 feet deep. The new stage has a total area of 1000 square feet. The dimensions of the new stage were created by adding the same distance *x* to the width and the depth of the old stage dimensions. What is the value of *x*?(Side 1)(Side 2) = New AreaFOILFACTORSeparate + Solve | A contestant tosses a horseshoe from one pit to another with an initial vertical velocity of 50 feet per second. The horseshoe is released 3 feet above the ground. Use the model *h* = − 16*t*2 + 50*t* + 3 where *h* is the height (in feet) and *t* is the time (in seconds) to tell how long the horseshoe was in the air when it’s 2 feet high.Use quadratic formula.  |