

## Factoring Quadratics – Teacher Notes

1. Open the Navigator program. Begin the class. After all students and the teacher have logged in, go to the Activity Center.
2. Set up the Activity Center. Make sure you Edit, Clear Activity Data before you begin.

Contribute: Equations

Configure: Number of equations per student 1  
Let students view graphs of equations  
Let students resubmit equations  
Start with empty equations

Fix the Window Settings: A standard window will work.

3. Go to Graph Equation display. Enter  $y = x^2 + 7x + 12$  in the ADD  $y=$  section. The teacher's equation and graph will appear on the screen. Instruct students to enter the factored form of the equation when the activity begins. Students will be able to check their graph before sending the equation. They will also be able to resubmit an equation if the first one sent did not match the teacher's graph. You can decide if you want to view student names.
4. Start the Activity. After all the equations are received, stop the activity. Click on the graph. Students who sent the correct factored equation will be hi-lighted. Discuss why the answer is correct.
5. Repeat this activity with the following quadratic equations. (You can choose to use other factorable quadratic equations for a review.)

$$x^2 + 2x - 8$$

$$x^2 - 4x - 5$$

$$x^2 - 3x$$

$$2x^2 - 2x - 12$$

$$x^2 - 9$$

$$16x^2 - 9$$

$$x^2 + 8x + 16$$

$$2x^2 + 5x - 3$$

$$6x^2 - 11x - 10$$

6. You can use this activity by giving students the factored form and asking them to send you the standard quadratic equation. (This would be a good way to review FOIL multiplication.)
7. Students should now complete the rest of the worksheet. This will review solving quadratic equations by using the zero product property.