# Activity 5.3 Solving Polynomial Equations by Factoring

For problems 1 – 6, solve by factoring. Identify the factors and then apply the Zero Product Property to determine the real number roots.

1. 

2. 

3. 

4. 

5. 

6. 

7. A candy factory needs a box that has a volume of 30 cubic inches. The width should be 2 inches less than the height, and the length should be 5 inches greater than the height. What should the dimensions of the box be, in inches? (You may use your graphing calculator to help you with this problem, but be sure to define all variables and show the function used to find the dimensions.)