

# Academic Algebra 1: Chapter 8

## “Factoring”

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Students have now developed the skills necessary to multiply algebraic expressions to form a new expression that is the product of two factors. When the product is given and the factors are found, the process is called factoring. Factoring is the inverse of multiplying. The lessons in this chapter use factoring of monomials and polynomials to solve problem situations that can be modeled by quadratic equations.

You will be asked to do a self-assessment before and after each lesson based on the scale below:

**Scale: 4 = I know this very well and can teach it to others.**

**3 = I know this pretty well and get nearly every problem right the first time.**

**2 = I am still learning this. I have some questions and am sometimes unsure.**

**1 = I am not sure about how to do this.**

Lesson 8-1 (Pages 420-424) Before: \_\_\_\_\_ After: \_\_\_\_\_

I can find the **prime factorization** of monomials

I can find the **greatest common factor** of monomials

Lesson 8-2 (Pages 426-431) Before: \_\_\_\_\_ After: \_\_\_\_\_

I can factor polynomials by using the distributive property

I can solve quadratic equations of the form  $ax^2 + bx = 0$

Lesson 8-3 (Pages 432-433) Before: \_\_\_\_\_ After: \_\_\_\_\_

I can factor trinomials of the form  $x^2 + bx + c$

I can solve equations of the form  $x^2 + bx + c = 0$

Lesson 8-4 (Pages 441-446) Before: \_\_\_\_\_ After: \_\_\_\_\_

I can factor trinomials of the form  $ax^2 + bx + c$

I can solve equations of the form  $ax^2 + bx + c = 0$

Lesson 8-5 (Pages 447-452) Before: \_\_\_\_\_ After: \_\_\_\_\_

I can factor binomials that are differences of squares

I can solve equations involving the differences of squares

Lesson 8-6 (Pages 454-456) Before: \_\_\_\_\_ After: \_\_\_\_\_

I can factor perfect square trinomials

I can solve equations involving perfect squares