

Ma 094 ~ Factoring PreTest Study Guide

For this test, you will have to demonstrate proficiency in the following skills:

- Finding the Greatest Common Factor between 2 monomials
- Answering questions like, “The product of two consecutive even integers is 120. What are the integers?” (Can be answered with factoring!)
- Factoring trinomials in the form of $x^2 + bx + c$ or $ax^2 + bx + c$, recognizing and factoring perfect square trinomials and difference of squares
- Finding the solutions to equations that are quadratic (Ex: $x^2 + 2x = 15$)
- Finding the solutions to quadratic equations that are not factorable over the integers (need to use the quadratic formula)
- Finding the discriminant of a quadratic equation (Hint: part of the quadratic formula)
- Graphing quadratic inequalities (Part of this is graphing the parabola that matches a quadratic equation. For the questions you will see, just being able to find the y-intercept and knowing if the parabola opens up or down will be enough to discern the correct answer. Of course you will have to know if the shading goes inside or outside of the parabola.)
- Knowing what happens to the imaginary number i ($\sqrt{-1}$) when it is squared, cubed, 4th-ed, etc.
- Finding the conjugate of a complex number and multiplying the number by the conjugate
- Adding or multiplying two complex numbers
- Applying any of the above to a real-world situation