Unit 4 Test Topics

1. Multiplying Polynomials
2. Factoring Polynomials
   a. GCF
   b. Magic X
   c. Grouping
   d. D.O.T.S
   e. Sum and Difference of Cubes
3. Long Division of Polynomials
4. Synthetic Division of Polynomials
5. Evaluating polynomials using synthetic division
6. Even and Odd Functions
7. Characteristics of Polynomials
   a. Absolute min/max
   b. Local min/max
   c. End Behavior
   d. $f(x) > 0$, $f(x) < 0$
   e. $f(x)$ increasing and decreasing
8. Creating an equation from factors
9. Creating an equation from a graph
10. Rational Root Theorem
11. Testing factors and zeros
12. Sketching graphs of polynomials
   a. x-intercepts
   b. y-intercepts
   c. end behavior and shape
13. Complex Conjugate Theorem
14. Irrational Conjugate Theorem
15. Pascal's Triangle and Binomial Expansion
16. TRANSFORMATIONS (independent review: pg. 206)

Recommended Review Problems from Textbook
Chapter 4 Review: #6-24, 25-27 (leave factored), 29-31 (leave factored), 34-37, 40-42
Chapter 4 Test: #1-8, 10