

Week 2 Algebra 2 Assignment:

Day 1: pp. 26-27 #1-25 odd, 29-33
Day 2: pp. 31-32 #1-23 odd, 28-32
Day 3: p. 35 #1-21 odd, 26-30
Day 4: pp. 38-39 #1-34
Day 5: Chapter 1 test

Notes on Assignment:

Page 26-27:

Work to show:

#1-25: If the polynomial needs to be factored more than once, show each step of factoring.

#29-33: Answers only is fine.

#1-9: Always look for the greatest common factor first. If there is no common factor, then look to see if you have a difference of squares.

#11-23: Some these will have a common factor that needs to be pulled out, but then the resulting polynomial may still need more factoring. Look for the difference of squares, or the sum or difference of cubes.

#13: This is the sum of cubes. Using the formulas on the bottom of page 26, decide what quantities in your problem stand for the a and b in the formula and substitute.

#25: Factor this as the difference of squares first.

#29-33: These are all from sections 1.1 or 1.3.

Pages 31-32:

Work to show:

#1-23: If the polynomial needs to be factored more than once, show each step of factoring.

#28-32: Show work.

#1-23: Always look for the greatest common factor first. Then factor the resulting polynomial factor. If there are only 2 terms, check to see if you have the difference of squares, or the sum or difference of cubes. If there are 3 terms, you will have to do backwards FOIL. If the 1st and last terms are perfect squares, check to see if you

have a perfect square trinomial. For backwards FOIL, remember that O + I must give you the middle term.

#21, 23: Use backwards FOIL on these, but realize that instead of x and x , you will have x^2 and x^2 as the first terms of your binomials.

Page 35:

Work to show:

#1-21: Factoring by grouping problems should have 2 steps shown.

#26-30: Answers only is fine.

#1-7: Pull out the common factors of each group (if it's not already done for you). Then draw a cloud around the common binomial factor of each group and pull it out.

#9: This is the difference of squares. Watch your signs.

#11-21: There is often more than one way to group the terms. If one grouping doesn't work, try a different one. Also, sometimes you need to pull out a negative and sometimes you don't. Trial and error (and then experience) will help you decide.

#17: Put a cloud around $(x-5)$. What does it look like now?

#19: You need to group a trinomial.

#21: Pull out the GCF and then group.

#30: What number, when added to the time on a clock, gives you the same time on the clock?

Pages 38-39:

Work to show:

#1-6: Answers only is fine.

#7-34: Show work.

Chapter 1 Review – no notes.

Chapter 1 Test:

What is on the test:

- Name the type (monomial, binomial, trinomial, or polynomial) and degree of a polynomial. Remember that the degree of a polynomial is the same as the highest degree of any of the terms. The degree of the term is the sum of the exponents on the variables.
- Simplify polynomial expressions:
 - add polynomials
 - subtract polynomials
 - multiply polynomials
 - divide polynomials
 - division by a monomial (Divide each term by the monomial)
 - division by a binomial (long division)
 - simplifying monomials and binomials raised to exponents
- Factor polynomials
 - Greatest Common Factor (GCF). Always look for this first!
 - Difference of squares
 - Sum or difference of cubes
 - Backwards FOIL. (You can use the shortcut if the coefficient on the squared term is 1.)
 - Grouping (last resort)
 - **Note:** Always look at your final answer and see if there's any more factoring you can do.
- Evaluate numeric expressions using the correct order of operations
- Write the name of the property illustrated.
- Name the set of numbers to which a number belongs.