

Unit 5 - Quadratic Functions

Day 8 Notes: Factoring by Grouping PH 9-8

Name: _____

Date: _____ Hour: _____

Example 1: Use the *DISTRIBUTIVE PROPERTY* to factor.

a. $t(v+17)+8(v+17)$

b. $x(x-7)-9(x-7)$

Example 2: Factor by grouping.

$$5x^4 + 20x^3 + 6x + 24$$

Example 3: Factor completely. Check for a GCF!!!

$$2y^3 + 6y^2 + 8y + 24$$

Example 4: Rewrite each expression in Standard Form (*highest degree to lowest degree*).

a. $2 - 50x - x^2 + 25x^3$

b. $2m^3 + 16 - m - 32m^2$

Example 5: Rewrite each expression in Standard Form then factor completely.

a. $-7 - 14p + p^2 + 2p^3$

b. $30x^2 + 45x^4 - 6x - 9x^3$

Example 6: Find the dimensions of a rectangle with the given area.

$$xy + 4 + 4x + y$$

Homework: Page 499 - 501 #2 – 16 even, 28 – 30 all, and 35 – 38 all, 56 – 60 all (20 exercises)