

Numbers, Relations &amp; Functions 10

Name: \_\_\_\_\_

Review Assignment – Expand/Simplify and Factoring

March 2014

**INSTRUCTIONS: Answer each of the following in the space provided. DUE: Beginning of class on Tuesday, March 18<sup>th</sup>**

1. Answer each of the following...

[9]

a) Give the prime factorization for 630

b) Find GCF of 228 and 300

c) Find the LCM of 18, 30 and 66

$$2 \times 3^2 \times 5 \times 7$$

$$12$$

$$990$$

2. Expand and simplify the following...

[9]

a)  $5(4x + 3)(x + 2)$

$$20x^2 + 55x + 30$$

b)  $2(5y - 6)^2$

$$50y^2 - 120y + 72$$

c)  $(2x - 3)(4x^2 + 3x - 5)$

$$8x^3 - 6x^2 - 19x + 15$$

3. Factor each of the following...

a)  $8x^3 + 12x$

$$4x(2x^2+3)$$

b)  $24x^2y - 12xy + 18xy^2$

$$6xy(4x-2+3y)$$

c)  $x^2 - 2x - 24$

$$(x-6)(x+4)$$

[3]

4. **Completely** factor each of the following...

a)  $49x^2 - 81y^2$

$$(7x-9y)(7x+9y)$$

b)  $4x^2 - 17x - 15$

$$(x-5)(4x+3)$$

c)  $9x^2 - 24x + 16$

$$(3x-4)^2$$

[6]

5. Completely factor each of the following...

a)  $32x^4 - 162$

$$2(4x^2-9)(4x^2+9)$$

b)  $2x^2 - 2x - 24$

$$2(x-4)(x+3)$$

c)  $10x^2 - 5x - 50$

$$5(2x-5)(x+2)$$

[9]

## Attachments

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Puzzle Worksheet - Grouping Like Terms.pdf

Puzzle Worksheet - Distribution Property.pdf

Example - Squaring a Binomial.avi

Worksheet - Factor GCF & Simple Trinomials.doc

Worksheet - Factoring Review.doc

Puzzle Worksheet - GCF.pdf

Puzzle Worksheet - Simple Trinomials.pdf

Worksheet - Expanding.pdf

Puzzle Worksheet - Difference of Squares.pdf

Puzzle Worksheet - Review of Factoring.pdf

Assignment - Expand\_Simplify\_Factor Mar. 2014.pdf

Review - Factoring.pdf