



- I can factor polynomials.

Name _____

Lesson 1 Day 2: Multiplying and Factoring Polynomial Expressions**Warm up.**

The total area of this rectangle is represented by $3a^2 + 3a$. Find expressions for the dimensions of the total rectangle.

A light green rectangle with a black border. Inside the rectangle, the text $3a^2 + 3a$ square units is written in black.

$3a^2 + 3a$ square units

😊 **We do** 😊

Factor each by factoring out the Greatest Common Factor:

1. $10ab + 5a$

2. $3g^3h - 9g^2h + 12h$

**YOU DO** 😊

Factor each by factoring out the Greatest Common Factor:

1. $6x^2y^3 + 9xy^4 + 18y^5$

2. $5x^6 - 25x$

😊 We do 😊

Factor the following examples of the difference of perfect squares.

1. $t^2 - 25$

2. $4x^2 - 9$

YOU DO 😊

Factor the following examples of the difference of perfect squares.

1. $16h^2 - 36k^2$



Factor completely:

1. $9y^2 - 100z^2$



Factor. Factor completely when necessary:

1. $a^4 - b^6$

2. $r^4 - 16s^4$ (Hint: This one will factor twice.)



Name _____

CW/Homework

**Lesson 1 Day 2:**

Factor:

1. $12x^4 - 4xy^2 + 2xy$

2. $x^6 - 25$

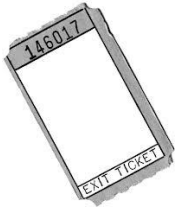
3. $6y^2 + 18$

4. $27y^2 + 18y$

5. $21b - 15a$

6. $14c^2 + 2c$

7. $3x^2 - 27$



Name _____

Lesson 1: Day 2____: Exit Ticket



Factor. (Factor completely when necessary).

1. $4x^2 - 25$

2. $15w^7 - 15w^3 + 10w$

3. Subtract $3y^2 - 5y + 7$ from $7y_2 + 10y + 6$