

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

Date: \_\_\_\_\_

**UNIT 1**

**LESSON 5**

**AIM: HOW DO WE FACTOR POLYNOMIALS?**

*Do Now:*

<p>1. What are the factors of 2?</p> <p>What are the factors of 4?</p> <p>What is the greatest common factor between the two?</p>	<p>2. Find the square root of the following:</p> <p><math>\sqrt{36}</math>    <math>\sqrt{4}</math>    <math>\sqrt{x^4}</math></p>	<p>3. Name two numbers that add to 5 and multiply to -6.</p>
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**METHODS OF FACTORING:**

**1. G.C.F**

1)  $2x - 4x^2$

2)  $3ab^2 - 6ab$

**2. D.O.T.S**

3)  $x^4 - 100$

4)  $36 - 4b^2$

**3. Easy Trinomials (a = 1)**

5)  $x^2 + 5x - 6$

6)  $x^4 + x^2 - 12$

**4. Factor Completely:**

7)  $2x^2 - 8x - 10$

8)  $x^4 - 10x^2 + 9$

**Practice:**

9)  $x^4 + 4x^2 - 12$

10)  $4x^2 - 4x - 28$

11)  $63c^2 - 7$

12)  $y^4 - 81$

13)  $\pi c^2 - \pi d^2$

14)  $x^4 - 2x^2 - 8$

\*15)  $x^8 - x^{12}$

\*16)  $x^8 + x^4 - 20$