**Math 2**

**Factor by Grouping and Difference of Squares**

**Steps for Factoring**

1. Check for **GCF** (greatest common factor) first
2. If there are two terms, check for the difference of two squares: **a2 – b2 = (a + b)(a – b)**
3. If there are three terms, use Trial and Error to try to factor into two binomials.

**Factoring the difference of squares:**

1. y2 – 121 2. t4 – 64

3. b2 – 144 4. 225 – n2

5. 16x2 + 81 6. P2 – 81r2

7. 27x2 – 48 8. X4 – 16

9. 9x2 – 8 10. 8x2 – 50

**Mixed Problems:**

1. 9x2 – 4 2. 24x2 – 6y2

3. 100x2 – 1 4. b4 – x2

5. 12x2 – 17x – 5 6. 16x2 + 9

7. 3x – 12x3 8. 

9. 16x2 + 4x – 12 10. 20x2 - 45

11. x2 – 30 12. a2 – 3a – 28