

**DAY 3 – Common Factoring and Difference of Squares**

1. Common factor each of the following.

|                 |                     |                |                     |
|-----------------|---------------------|----------------|---------------------|
| a. $6x + 8$     | b. $6x - 2$         | c. $5x + 10$   | d. $-3x + 9$        |
| e. $-15x - 25$  | f. $2x^2 - 4$       | g. $2x^2 + 6x$ | h. $-2x^2 - 3x$     |
| i. $3x^2 + 27x$ | j. $3x^2 + 3x + 12$ | k. $-x^2 + 1x$ | l. $12x^2 + 3x - 9$ |

2. Factor each of the following using difference of squares.

|                |                     |                 |                    |
|----------------|---------------------|-----------------|--------------------|
| a. $x^2 - 9$   | b. $x^2 - 16$       | c. $x^2 - 64$   | d. $x^2 - 121$     |
| e. $4x^2 - 25$ | f. $16x^2 - 81$     | g. $x^2 - 1$    | h. $9x^2 - 49$     |
| i. $64x^2 - 1$ | j. $169x^2 - 25y^2$ | k. $36x^2 - 25$ | l. $64a^2 - 81b^2$ |

3. Factor each of the following using the most appropriate method.

|                    |                      |                      |                       |
|--------------------|----------------------|----------------------|-----------------------|
| a. $50x^2 - 5$     | b. $6x^2 - 18x + 24$ | c. $4x^2 - 49$       | d. $81x^2 - 25$       |
| e. $-x^2 - 3x - 2$ | f. $6x - 12$         | g. $-2x^2 - 4x - 12$ | h. $8x^2 - 40$        |
| i. $81x^2 - 25$    | j. $25x^2 - 64$      | k. $3x^2 - 15x + 21$ | l. $36x^2 - 27x + 3$  |
| m. $100x^2 - 1$    | n. $-2x^2 + 6$       | o. $36x^2 - 12$      | p. $3x^3 - 2x^2 + 1x$ |