ALGEBRA I

LEARNING OUTCOMES

- **I can factor polynomials (with a leading coefficient of 1)**

Name _____

Lesson 2: Multiplying and Factoring Polynomials Expression

WARM-UP

1. Use the box method or distribution to find the product of:

a. $(x+7)(x+3)$	b. $(x+1)(x+7)$

Exercises

2. Factor: $\boldsymbol{x^2+10x+21}$

3. Factor**:** x^2+8x+7

4. Factor**:** m^2+m-90

5. Factor: $k^2 - 13k + 40$

6. Factor: $-100 + 99v + v^2$

7. Factor Completely: $2x^3 - 50x$

8. Factor Completely: $-16t^2 + 32t + 48$

Name _____ CW/Homework

Lesson 2: Multiplying and Factoring Polynomials Expression

Factor these trinomial as the product of two binomials and check your answer by multiplying:

a. $x^2 + 3x + 2$

b. $x^2 - 8x + 15$

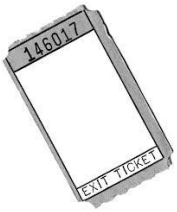
c. $x^2 + 8x + 15$

Factor completely:

d. $4m^2 - 4n^2$

e. $-2x^3 - 2x^2 + 112x$

f. $y^8 - 81x^4$



Name _____

Lesson ___: Exit Ticket

The parking lot at Gene Simon's Donut Palace is going to be enlarged, so that there will be an additional 30 ft. of parking space in the front and 30 ft. on the side of the lot. Write an expression in terms of x that can be used to represent the area of the new parking lot. Explain how your solution is demonstrated in the area model.