

Name _____
UNIT 7

Date _____
LESSON 4-Day 1

Do Now

A. Simplify: $(x + 1)(x + 7)$

B. Simplify: $(x + 2)(x + 5)$

Aim: TRINOMIAL FACTORING WITH LEADING COEFFICIENT IS ONE

Method 1:

$$x^2 + 8x + 7$$

Method 2:

$$x^2 + 8x + 7$$

Trinomial	Factors of the last term	Check
1. $x^2 + 7x + 12$	$y = \frac{12}{x}$ 	
2. $x^2 + 7x + 10$	$y = \frac{10}{x}$ 	

Steps to find all the factors of a number on the calculator:

1. $y = \#/x$ (last term)
2. Press 2nd graph to look at the table of factors

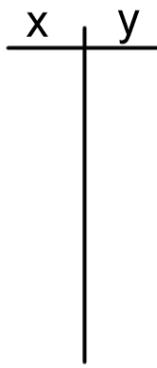
Steps for Easy Trinomial Factoring

- 1) “Double bubble”, with an x in each ().
- 2) The first sign drops down in the 1st ().
- 3) Multiply the given signs to determine the 2nd sign.
- 4) Find factors of the last # that add or subtract to the middle #.
- 5) The bigger # goes first!
- 6) Check by Tabular Method or Double Distributing

3. $x^2 + 11x + 24$	$y = \frac{24}{x}$ 	
---------------------	------------------------	--

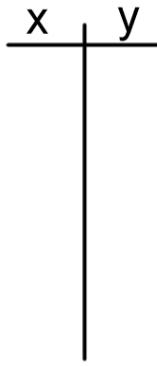
$$4. \quad x^2 + 10x + 21$$

$$y = \frac{1}{x}$$



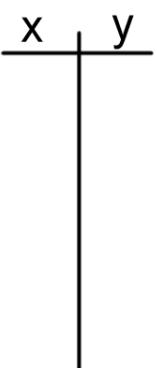
$$5. \quad x^2 + 13x + 36$$

$$y = \frac{1}{x}$$



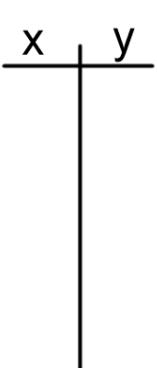
$$6. \quad x^2 - 8x + 7$$

$$y = \frac{1}{x}$$



$$7. \quad x^2 - 6x + 8$$

$$y = \frac{1}{x}$$



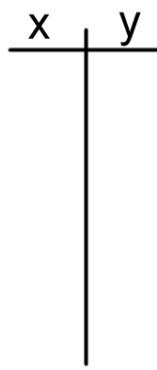
$$8. \quad x^2 - 14x + 48$$

$$y = \frac{1}{x}$$



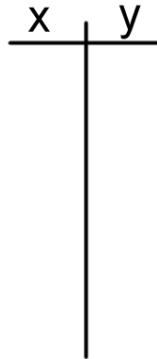
$$9. \quad x^2 - 20x + 36$$

$$y = \frac{x}{x}$$



$$10. \quad x^2 - 16x + 64$$

$$y = \frac{x}{x}$$

**Mixed Practice:**

Remember to always look for _____ factoring 1st!!!!

$$11. \quad y^2 - 36$$

Method: _____

$$12. \quad 6y + 24$$

Method: _____

$$13. \quad y^2 - 3y - 28$$

Method: _____

$$14. \quad y^2 - 121$$

Method: _____

$$15. \ 15x + 60y$$

Method: _____

$$16. \ y^2 + 13y - 30$$

Method: _____