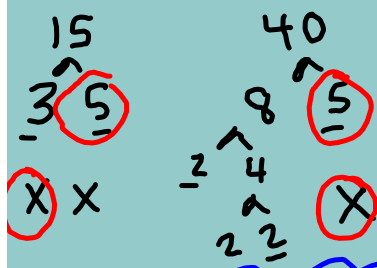


## Warm Up - Tuesday, January 17th

1) Factor by finding the GCF. *(Answer must be in factored form, not just the GCF)*

$$15x^2 - 40x$$

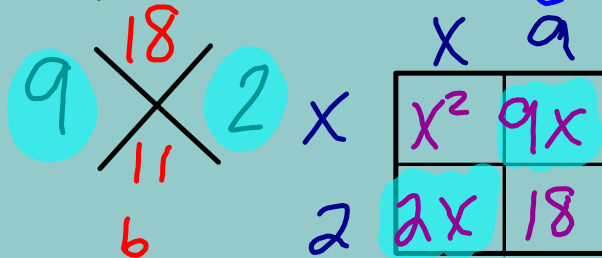


$$5x(3x - 8)$$

2) Factor the following trinomial.  $a=1$

$$x^2 + 11x + 18$$

$b=11$   
 $c=18$



9 2	-9	-2	(x+2)(x+9)
1	18	-18	
6	3	-6	

On your sticky note, write your name and then number to two.

Answer the following questions **truthfully**.

- 1) Which best describes the **first** question on the warm up?
- a) Easy Peasy Lemon Squeezy
  - b) I made a small mistake.
  - c) I found the GCF and then got stuck.
  - d) I knew to make factor trees, but that's it.
  - e) I didn't even know where to start.

2) Which best describes the **second** question on the warm up?

- a) 100 - Got it right the whole way through.
- b) I filled in the boxes, but then didn't know what to do.
- c) I filled in the X completely, but didn't know how to fill in the boxes.
- d) I have no clue how to fill in the X.
- e) Why is there an X and a box?!

If you have put away your homework, please get it back out. The answers are...

**Example:**  $(x+4)(x-8)$

**#1:**  $(x+2)(x+4)$  or  $(x+4)(x+2)$  or  $(1x+4)(1x+2)$

**#2:**  $(x-4)(x-3)$

For the remainder of class, we are going to work on two things: factoring by finding the GCF and factoring trinomials. We will break up into two groups for each topic.

Please listen carefully to see what group you are in.

# **GCF Review**

Algebra 1

Name \_\_\_\_\_ ID: 1

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GCF Practice

Date \_\_\_\_\_ Period \_\_\_\_\_

Factor the common factor out of each expression. Make sure the expression is in standard form before you begin.

1)  $30k^2 + 3$

GCF: 3

$-3(10k^2 - 1)$

2)  $-12 + 32r$

GCF:  $2 \cdot 2 = 4$

$4(8r - 3)$

3)  $24m^5 + 40m$

GCF:  $2 \cdot 2 \cdot 2 \cdot m$   
 $8m$

$8m(3m^4 + 5)$

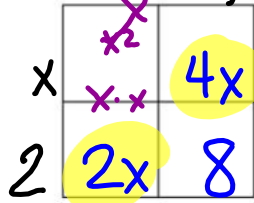
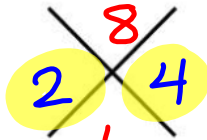
4)  $4 - 28x + 32x^4$



# Factoring Review

$a=1 \quad b=6 \quad c=8$

$x^2 + 6x + 8$   
 $x^2 + 2x + 4x + 8$



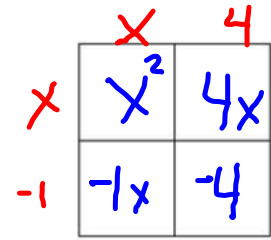
$2 \cdot 8 \rightarrow 16$   
 $1 \cdot 8 \rightarrow 8$   
 $-1 \cdot 8 \rightarrow -8$   
 $-2 \cdot 4 \rightarrow -8$

$(x+4)(x+2)$   
 $(x+2)(x+4)$

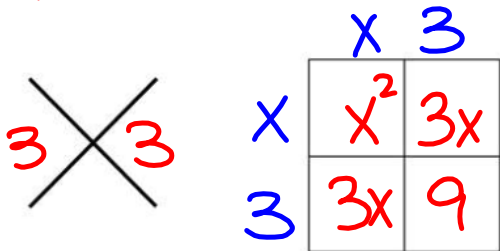
$-4$   
 $1 \cdot -4 \rightarrow -4$   
 $-2 \cdot 2 \rightarrow -4$   
 $-1 \cdot 4 \rightarrow -4$

$a=1 \quad b=3 \quad c=-4$   
 $a \cdot c = -4$   
 $-1 \cdot 4 = -4$

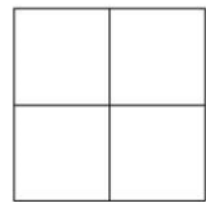
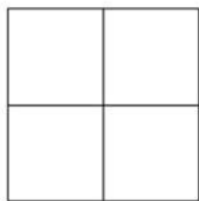
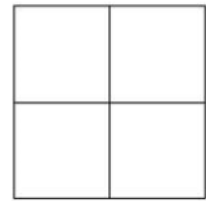
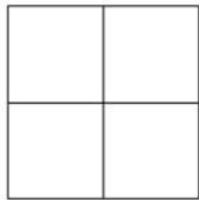
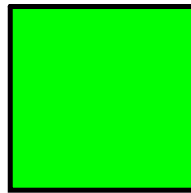
$x^2 + 3x - 4$   
 $x^2 - 1x + 4x - 4$



$(x+4)(x-1)$   
 $(x-1)(x+4)$



$(x+3)(x+3)$  or  $(x+3)^2$



Send one person from each group to grab enough iResponds for everyone at your group. Turn on and login to your iRespond clicker.

Do any scratch work on your desk with the dry erase marker.

# Ticket out the Door

**Factor the common factor out of each expression.**

1)  $30n^3 - 12n$

- A) I have no idea how to do this.
- B)  $n(5n - 2)$
- C)  $3n(5n^3 - 2)$
- D)  $6n(5n^2 - 2)$
- E)  $6n(5n - 2)$

**Factor each completely.**

2)  $b^2 + 13b + 42$

- A) I have no idea how to do this.
- B)  $(b - 1)(b - 2)$
- C)  $(b + 6)(b + 7)$
- D)  $(b - 7)(b + 10)$
- E)  $(b + 6)(b - 7)$