1-2 Factoring Quadratics

Objective:

- I can factor a trinomial with a leading coefficient of one

Nov 7-12:49 PM

Process for LC of 1

x^2+3x+2

2

1 | 2

-1 | -2

1. Looking for factors of 2 that add to give you 3

   Factors: 2 numbers that multiply to give you a value

2. Once you identify the factors, write as binomials

   (x+ 1)(x+ 2)

The sign in the binomial will be determined by the sign of the factor

Jun 18-11:54 AM

Factor each quadratic expression.

a. $x^2 + 5x + 4$

(x + 1)(x + 4)

4

1 | 4

b. $x^2 + 6x + 8$

(x+2)(x+4)

8

1 | 8

2 | 4

Nov 7-1:33 PM

Factor each quadratic expression.

c. $x^2 - 7x + 10$

(x - 2)(x - 5)

10

1 | 10

2 | 5

-2 -5

d. $x^2 - 2x - 8$

(x+2)(x-4)

-8

-2 | 4

2 | -4

Nov 7-1:33 PM

Factor each quadratic as a group. Each correct answer will count as 2 points and the bonus question will count as 5 points. After the 6 min time limit is up, the group with the most points wins!

1. x^2+8x+7
2. $x^2-11x+10$
3. $x^2+4x-12$
4. $x^2-10x+9$
5. $x^2+2x-24$
6. $x^2+16x+64$

Bonus: $x^2-4x+24$

Jan 3-10:17 AM

Correct Solutions:

1. x^2+8x+7 (x+7)(x+1)
2. $x^2-11x+10$ (x-10)(x-1)
3. $x^2+4x-12$ (x-2)(x+6)
4. $x^2-10x+9$ (x-1)(x-9)
5. $x^2+2x-24$ (x+6)(x-4)
6. $x^2+16x+64$ (x+8)(x+8)

Bonus: $x^2-4x+24$ Not Factorable

Jun 18-12:10 PM