2nd _____ 7D9B8

3rd _____ 7D9BY

4th _____ 7D9B9

Jan 10-8:07 AM

Warm Up

Can you fill in the blank with the factor that got distributed???

1) $\underline{2} \times (x+3) = 2x^2 + 6x$

2) $4(\underline{2x^2 - 4x + 1}) = 8x^2 - 16x + 4$

3) $\underline{-4} \times (5x-3) = -20x^2 + 12x$

4) $3x(\underline{x^2 + 5}) = 3x^3 + 15x$

Nov 11-9:21 AM

LT 4.3

Textbook Chapter 4.3A

Topic: Greatest Common Factor

How Can I translate quadratic functions from standard form into Intercept form?

1) Greatest common Factor

2) Count Terms

3) Finish Factoring

Jun 10-9:15 AM

Intro to Factoring: GCF

Definition of a Factor: Numbers you can multiply together to get another number

2 x 3 = 6, 2 and 3 are factors

Find the missing Factor of the problem:

1. 5 x 6 = 30
2. 7 x 8 = 56
3. 150 = 6 x 25
4. 363 = 11 x 33

Nov 11-9:22 AM

List all the Factors of:

$36x^2$

1, 36 $x \cdot x$
2, 18
3, 12
4, 9
6, 6

$24x^3$

1, 24 $x \cdot x \cdot x$
2, 12
3, 8
4, 6

GCF = $12x^2$

Aug 28-7:15 AM

Factoring out the Greatest Common Factor

What is the greatest common factor (GCF)?
It is the largest value that you can divide out of every term.

What is the GCF of...

$3x, 9x^2, 18$
GCF = 3

$6x^2, 12x^3, 9x$
GCF = $3x$

$4a^2b, 12ab^2, 16a$
GCF = $4a$

Sep 15-3:44 PM

Factoring out the Greatest Common Factor

Factor out the greatest common factor.

GCF = 7x

$14x^2 - 49x$

$7x(2x-7) = 14x^2 - 49x$

GCF = 3x

$3x^3 + 27x^2 - 9x$

$3x(x^2 + 9x - 3)$

Sep 15-3:44 PM

Factoring out the Greatest Common Factor

Factor out the greatest common factor.

GCF = 5z

$25z^2 + 5z$

$5z(5z + 1)$

GCF = 2b

$4a^2b + 6ab - 2b^2$

$2b(2a^2 + 3a - 1b)$

Sep 15-3:44 PM

Factoring out the Greatest Common Factor

Write the quadratic in intercept form and identify the intercepts.

GCF = 2x

$y = 2x^2 - 4x$

$y = (2x)(x - 2)$

$y = (2x)(x + 2)$

GCF = −5x

$y = -5x^2 + 15x$

$y = (-5x)(x - 3)$

$y = 5x(-x + 3)$

Sep 15-3:44 PM

Multiply:

1.(x + 3)(x + 4)	2. (x - 3)(x - 4)
3.(x + 3)(x - 4)	4.(x - 3)(x + 4)

Nov 16-8:36 AM