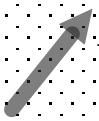
LT 4.3

I can translate quadratic equations from standard form INTO factored and vertex forms .



working backwards!

4.3C - Factoring Polynomials with $a \neq 1$

Sep 10-3:04 PM

Strategy:

1. Factor out any GCF first
2. Find factors of first term (start with the closest numbers together)
3. Choose your +/- signs
4. Guess and check!

Nov 12-3:39 PM

$$x^2 - 16$$

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

$4x^2 + 12x + 9$

Jan 19-8:24 AM

factoring when a ≠1

$(2x+4)(x+5)$

Factor completely: $(x+2)(2x+10)$

$$2x^2 + 14x + 20$$

$2(x^2 + 7x + 10)$

$2(x + 5)(x + 2)$

$x^2 + 2x + 5x + 10$

$x^2 + 7x + 10$

Sep 19-3:39 PM

factoring when a ≠1

Factor completely:

$$5x^2 - 60x - 140$$

28
1 28
2 14
4 7

$5(x^2 - 12x - 28)$

$5(x - 14)(x + 2)$

$5(x^2 + 2x - 14x - 28)$

$-12x$

Sep 19-3:39 PM

factoring when a ≠1

Factor completely:

$$2x^2 + 7x + 3$$

3
1 3

$(2x + 1)(1x + 3)$

$2x^2 + 6x + 1x + 3$

$2x^2 + 7x + 3$

Sep 19-3:39 PM

factoring when a ≠1

10
1 10
2 5

Factor completely:

$$3x^2+17x+10$$

$(3x+2)(1x+5)$

$x+5$

$x=-5$

Nov 5-8:33 AM

factoring when a ≠1

$$4x^2-36$$

$4(x^2-9)$

$4(x+3)(x-3)$

Jan 19-8:23 AM

factoring when a ≠1

Factor completely:

$$8x^2+18x+9$$

8: 1,8 / 2,4

9: 1,9 / 3,3

$(4x+3)(2x+3)$

$8x^2+12x+6x+9$

$8x^2+18x+9$

$4\cdot x=-\frac{3}{4}\cdot 4\,(4x+3)(2x+3)$

$4x=-3$

$4x+3$

$4\cdot x+3=$

Sep 19-3:39 PM

factoring when a ≠1

Factor completely:

$$3t^2+2t-8$$

Sep 19-3:39 PM

factoring when a ≠1

$$4t^2 - 25$$

Jan 19-8:25 AM

factoring when a ≠1

Factor completely:

$$2x^2 - 11x - 6$$

Nov 5-8:33 AM

factoring when a ≠1

Factor completely:

$$6x^2 - x - 15$$

$(2x + 3)(3x - 5)$

$6x^2 + 10x - 9x - 15$

$6x^2 + 1x - 15$

$2 \cdot x = -\frac{3}{2} \cdot 2$

$2x = -3$

$2x + 3$

$(2x+3)(3x - 5)$

Sep 19-3:39 PM

factoring when a ≠1

Factor completely:

$$4x^2 + 48x + 36$$

Jan 19-8:27 AM

4.3CD Homework

Pg 39 (5,7,11,13,19)
Pg 41 (1, 5-13 odd)

date assigned: tuesday

date due/HH:

Jan 19-8:22 AM