April 13, 2016

$-4k^2 - 8k - 3 = -3 - 5k^2$

$k^2 - 8k + 0 = 0$

$k^2 - 8k = 0$ GCF $= k$

$k(k-8) = 0$

① $k = 0$

② $k = 8$

Apr 13-9:52 AM

$x^2 + x - 42$ $\quad ac = -42$ $\quad b = 1$

+	−
7	6

$x^2 + 7x - 6x - 42$

$x(x+7) - 6(x+7)$

$(x+7)(x-6)$

Apr 13-10:22 AM

$-x^2 + 12x - 11$

$-(x^2 - 12x + 11)$

Apr 13-10:23 AM

$16t + 15t^2 - 15$

$15t^2 + 16t - 15$ $\quad ac = -225$ $\quad b = 16$

+	−		
20	4	−80	16
25	9	−225	16

$15t^2 + 25t - 9t - 15$

$5t(3t+5) - 3t(3t+5)$

$(3t+5)(5t-3)$

Apr 13-10:24 AM

$28x^2 + 12x - 88$

$4[7x^2 + 3x - 22]$ $\quad ac = -154$ $\quad b = 3$

+	−		
7	4	−28	3
8	5	−40	3
10	7	−70	3
13	10	−130	3
14	11	−154	3

$4[7x^2 + 14x - 11x - 22]$

$4[7x(x+2) - 11(x+2)]$

$4(x+2)(7x-11)$

Apr 13-10:20 AM

6.5 Factoring Special Forms

$(x+2)(x-2) = x^2 - 4 = (x)^2 - (2)^2$ Difference of Two Squares

F: $x \cdot x = x^2$

O: $x \cdot (-2) = -2x$

I: $2 \cdot x = 2x$ } 0

L: $2 \cdot (-2) = -4$

Apr 13-10:41 AM

General

$(a+b)(a-b) = a^2 - ab + ab + b^2$

$= a^2 - b^2$

Difference of Two Squares

Apr 13-10:45 AM

$a^2 - b^2 = (a+b)(a-b)$

$25x^2 - 16$

$a^2 \quad - \quad b^2$

$a = 5x$

$b = 4$

$(5x+4)(5x-4)$

$25x^2 - 20x + 20x - 16$

$25x^2 - 16$

Apr 13-10:47 AM