April 5, 2016

b a + c a

#58) $40v(7v-4) + 72(7v-4)$

$(7v-4)(40v+72)$

H.P

GCF = 8

$(7v-4)\,8(5v+9)$

$8(7v-4)(5v+9)$

Apr 5-9:00 AM

Factoring by Grouping

Group 1 Group 2 (4 terms)

#61) $x^2 + 2x - 9x - 18$

GCF = x GCF = -9

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

GCF

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

Apr 5-9:07 AM

Do 6.1 #1 - #75 m3

SSC Due tomorrow

Do 6.2 #1 - #48 m3

Apr 5-9:20 AM

6.2 Zero Product Property

$ab = 0$

factors Product

① $a = 0$

② $b = 0$

③ a & $b = 0$

Apr 5-9:22 AM

Equations

Linear (Line)	non-Linear (not a line, but a curve)
* All linear equations are degree 1	② two solutions
$2x + 4 = 8$	$x^2 = 8x$
$y = -3x + 9$	$(x+3)(x-9) = 0$
$f(x) = -5x - 4$	FOIL
$y = x$	F: $x \cdot x = x^2$
	O: $x \cdot (-9) = -9x$ } collect
	I: $3 \cdot x = 3x$ } collect
	L: $3 \cdot (-9) = -27$
	$x^2 - 9x + 3x - 27 = 0$
	$x^2 - 6x - 27 = 0$

Apr 5-9:25 AM

$x^2 = 8x$ Solve for x using the Zero Product Property

① Set equation equal to zero

$x^2 - 8x = 0$

② Factor out the GCF

$x(x-8) = 0$

① $x = 0$

② $x - 8 = 0$ solve for x

$x = 8$

③ Check

① $x = 0$ $x^2 = 8x$

$(0)^2 = 8(0)$

$0 = 0$ ✓

② $x = 8$

$(8)^2 = 8(8)$

$8 \cdot 8 = 64$

$64 = 64$ ✓

Apr 5-9:35 AM

$(x+3)(x-9) = 0$

① $x+3=0$

$x=-3$

② $x-9=0$

$x=9$

Ok

$x=-3$

$(-3+3)(-3-9)=0$

$0\cdot(-12) = 0$

$0 = 0$ ✓

$x=9$

$(9+3)(9-9)=0$

$(12)\cdot 0 = 0$

$0 = 0$ ✓

$x^2-6x-27=0$

$(-3)^2-6(-3)-27=0$

$9+18-27=0$

$27-27=0$

$0=0$ ✓

Apr 5-9:43 AM

Apr 5-9:48 AM