November 15, 2016

* Quiz Tomorrow
6.1, 6.3, 6.4, 6.5

* Do 6.5
#9 – #27 odd
#37 – #79 odd

Nov 15-10:02 AM

6.4

keep pointing

$-11 = x^2 - 12x$
$+11 \quad +11$

* note: This is an equation where we are factoring to solve.
- always set one side equal to zero and factor the other side.

$0 = x^2 - 12x + 11$

$ac = 11 \quad b = -12$

-11×-1

$0 = x^2 - 11x - x + 11$
$0 = x(x-11) - 1(x-11)$
$0 = (x-11)(x-1)$

① $x - 11 = 0$, $x = 11$
② $x - 1 = 0$, $x = 1$

Solutions are found using the Zero Factor Property: $ab = 0$

Nov 15-10:07 AM

$x^3y^3 - 1$

$(xy - 1)(x^2y^2 + xy + 1)$

Ck

$x^3y^3 + x^2y^2 + xy - x^2y^2 - xy - 1$

$x^3y^3 - 1$ ✓

Nov 15-10:16 AM

① Difference of Two Squares

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

Factored Form

② Sum or Difference of Two Cubes

$a^3 \pm b^3 = (a \pm b)(a^2 \mp ab + b^2)$

Factored Form

Nov 15-10:20 AM

$x^2 + 8x + 16$ ← Perfect Square Trinomial

$ac = 16 \quad b = 8$

4×4

$x^2 + 4x + 4x + 16$
$x(x+4) + 4(x+4)$
$(x+4)(x+4)$
or
$(x+4)^2$

Nov 15-10:25 AM

$3x^2 - 33x + 54$

① Factor Completely

$3x^2 - 33x + 54$

GCF: 3

$3(x^2 - 11x + 18)$

$ac = 18 \quad b = -11$

-9×-2

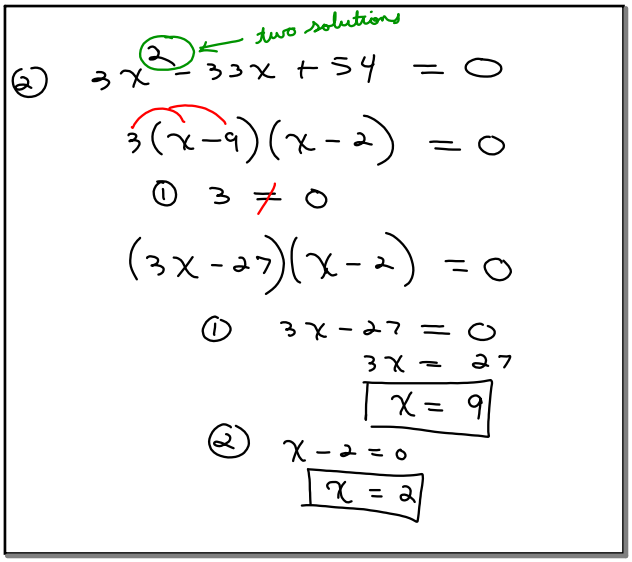
$3(x^2 - 9x - 2x + 18)$
$3(x(x-9) - 2(x-9))$

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

Completely Factored

* where all terms are N.P.

Nov 15-10:33 AM



Nov 15-10:38 AM

Nov 15-10:44 AM