November 11, 2016

#18) $16b^2 + 60b - 100$

$4(4b^2 + 15b - 25)$

$4(4b^2 + 20b - 5b - 25)$ $\quad ac = -100$, $b = 15$

+	−
20	5

$4(4b(b+5) - 5(b+5))$

$4(b+5)(4b-5)$

Nov 11-9:02 AM

$ax^2 + bx + c = 0$ (2 ← number of solutions)

$x^2 - x - 56 = 0$ (a, b) } Solve for "x"

$(x-8)(x+7) = 0$

* Zero Product Property

$ab = 0$

① $a = 0$

② $b = 0$

③ a & $b = 0$

$0 \cdot 0 = 0$

① $x - 8 = 0$

$x = 8$

② $x + 7 = 0$

$x = -7$ } solutions

Check

① $x = 8$ $\quad x^2 - x - 56 = 0$

$(8)^2 - (8) - 56 = 0$

$64 - 8 - 56 = 0$

$56 - 56 = 0$

$0 = 0$ ✓

② $x = -7$

$(-7)^2 - (-7) - 56 = 0$

$49 + 7 - 56 = 0$

$56 - 56 = 0$

$0 = 0$ ✓

Nov 11-9:31 AM

$26x - 9 = -3x^2$ (+3x² on both sides)

$3x^2 + 26x - 9 = 0$

$3x^2 + 27x - x - 9 = 0$ $\quad ac = -27$, $b = 26$

+	−
27	1

$3x(x+9) - 1(x+9) = 0$

$(x+9)(3x-1) = 0$

① $x + 9 = 0$

$x = -9$

② $3x - 1 = 0$

$3x = 1$

$x = 1/3$

Or

$x = 1/3$

$3(\frac{1}{3})^2 + 26(\frac{1}{3}) - 9 = 0$

$\frac{1}{3}(\frac{1}{3}) + \frac{26}{3} - \frac{9}{1} = 0$

$\frac{1}{3} + \frac{26}{3} - \frac{9}{1} = 0$

$\frac{27}{3} - 9 = 0$

$9 - 9 = 0$

$0 = 0$ ✓

Nov 11-9:43 AM

Do 6.3 & 6.4

Nov 11-9:48 AM