

1.5 Solving Quadratic Equations Part 2 9/3/19

Ex 1: Solve
 $9x^2 - 4x - 11 = 0$

Recall: $x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$

$y = ax^2 + bx + c$

Step 1: $9x^2 - 4x - 11 = 0$

Step 2: $a = 9$ $b = -4$ $c = -11$

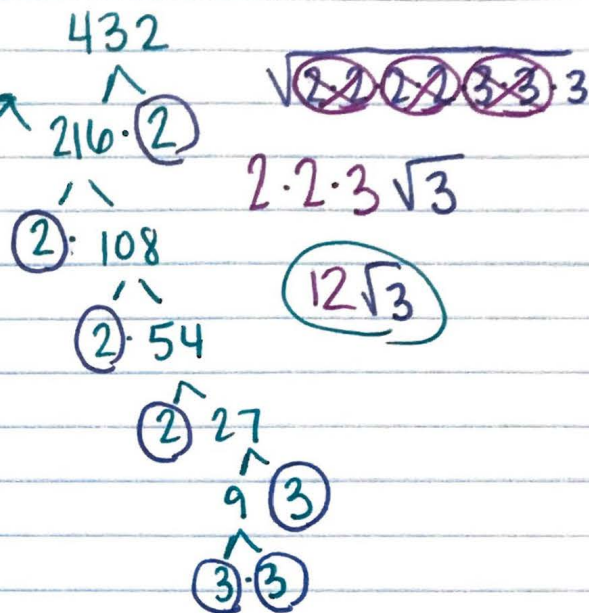
Step 3:

$x = \frac{-(-4) \pm \sqrt{(-4)^2 - 4(9)(-11)}}{2(9)}$

Step 4: $x = \frac{4 \pm \sqrt{432}}{18}$

Step 5: Simplify radical

$x = \frac{4 \pm 12\sqrt{3}}{18}$



Ex 2: Solve $8m^2 + 6m + 1 = 0$

Step 2: $a = 8$ $b = 6$ $c = 1$

Step 3: $x = \frac{-(6) \pm \sqrt{(6)^2 - 4(8)(1)}}{2(8)}$

Step 4: $x = \frac{-6 \pm \sqrt{4}}{16}$

Step 5: $x = \frac{-6 \pm 2}{16}$