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Solving the quadratic equation $x^2 + 4x + 3 = 0$: Recall: The \bigcirc Quadratic Formula says r_1 and r_2 are \bigcirc the roots of: $ax^2 + bx + c = 0$ $r_{1,2} = \frac{-(b) \pm \sqrt{(b)^2 - 4ac}}{2a}$ $r_{1,2} = \frac{-(4) \pm \sqrt{(4)^2 - 4 \cdot 1 \cdot 3}}{2 \cdot 1}$ $= \frac{\frac{2 \cdot 1}{2}}{\frac{-4 \pm \sqrt{16 - 12}}{2}}$ $= \frac{\frac{-4 \pm \sqrt{4}}{2}}{\frac{-4 \pm 2}{2}}$ $= \frac{\frac{-2}{2}}{2} \text{ and } \frac{\frac{-6}{2}}{\frac{1}{2}}$ = -1 and $-\overline{3}$

The solutions to $x^2 + 4x + 3 = 0$ are: $x = r_{1,2} = -1, -3$

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