

CONCEPT: THE QUADRATIC FORMULA

The quadratic formula is used for algebraic equations that contain an x variable raised to the second power: _____.

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

The quadratic formula is most commonly used for questions dealing with chemical equilibrium.

Although the presence of the \pm sign gives two possible values for x, only one of them will be significant and used as the answer.

EXAMPLE: Using the quadratic formula solve for x when given the following algebraic expression:

$$4x = -2.13 \times 10^{-4} + \frac{1.75 \times 10^{-5}}{x}$$