QUADRATIC FORMULA SOLUTION GUIDE.

It's to my concern to explain how to find the solutions of a quadratic equation using the quadratic formula. The quadratic formula is given by : $X=(-b + \sqrt{b^2-4ac})/2a$. Here's a step-by-step guide on how to use it :

1.Identify the coefficients : A quadratic equation is of the form $ax^2 + bx + c = 0$, where , 'a', 'b' and 'c' are coefficients . Identify these values from the given equation .

2. Substitute the values : Plug the identified values of 'a' , 'b' and 'c' into the quadratic formula .

3. Calculate the discriminant : The discriminant (D) is the value inside the square root ($\sqrt{}$) in the formula , given by D = b \wedge 2 - 4ac .

4. Determine the nature of the solutions : The discriminant helps us understand the nature of the solutions . If D = 0, there is one real solution (a repeated root) . If D < 0, there are no real solutions, but there can be two complex solutions.

5. Calculate the solutions Use the formula to find the values of 'x'. For D > 0, there will be two real solutions, while for D = 0, there will be one real solution (which will be the same for both roots). For D < 0, the solutions will be in the form of complex number.

NOTE: Remember to check your work and verify if the solutions are correct by substituting the back into the original equation .