

1030-34-10

Ali A. Salim* (alisoudani57@yahoo.com), Damascus, Syria. *Solution of first order second degree quadratic differential equation.*

The general form of this differential equation has a quadratic expression of the first derivative of Y on the L.H.S and the R.H.S of this equation as a quadratic polynomial of Y . The coefficients are arbitrary functions of (X) . This equation can be solved by using a comparison method which is abbreviated by a convenient linear substitution in the above equation and comparing the result with a solvable generated equation of the same type and then finding the unknown functions. The general solution can be written as a general formula in terms of the equation coefficients. (Received June 02, 2007)