

Given that a quadratic curve passes through (x_1, y_1) , (x_2, y_2) and (x_3, y_3) , the equation of the curve is given as:

$$y = \frac{x_1 y_3 + x_2 y_1 + x_3 y_2 - x_1 y_2 - x_2 y_3 - x_3 y_1}{x_1^2 x_2 + x_2^2 x_3 + x_3^2 x_1 - x_1^2 x_3 - x_2^2 x_1 - x_3^2 x_2} x^2 + \frac{x_1^2 y_2 + x_2^2 y_3 + x_3^2 y_1 - x_1^2 y_3 - x_2^2 y_1 - x_3^2 y_2}{x_1^2 x_2 + x_2^2 x_3 + x_3^2 x_1 - x_1^2 x_3 - x_2^2 x_1 - x_3^2 x_2} x + \frac{x_1^2 x_2 y_3 + x_2^2 x_3 y_1 + x_3^2 x_1 y_2 - x_1^2 x_3 y_2 - x_2^2 x_1 y_3 - x_3^2 x_2 y_1}{x_1^2 x_2 + x_2^2 x_3 + x_3^2 x_1 - x_1^2 x_3 - x_2^2 x_1 - x_3^2 x_2}$$