The r^{th} term of a Quadratic Sequence

Summary of the Generating Formulae for the r^{th} term of a Quadratic Sequence

Form 1 The general term T_r of the general quadratic sequence given in terms of the first term P, the gap D between the first two terms and the constant number g in the second row of differences is;

$$T_r = \frac{g}{2} r^2 + \left(D - \frac{3}{2} g\right) r + P - D + g$$

Form 2 The general term T_r of the general quadratic sequence expressed using the first three terms P, Q and R is:

$$T_r = \frac{1}{2}(P - 2Q + R)\, r^2 + \frac{1}{2}(-5P + 8Q - 3R)\, r + 3P - 3Q + R$$

Tutorial produced at Night Park Lane by Anthony van Bïck
www.nightparklane.com