Determining Equations of Polynomials Given Points on the Function

For each of the following sets of points, determine the equation of the polynomial function.

Example 1

(1,0) (2,3) (3,10) (4,21) (5,36) (6,55)

x	y	Δy	$\Delta^2 y$	$\Delta^3 y$

Example 2

(1,-3) (2,2) (3,33) (4,108) (5,245) (6,462)

x	Y	Δy	$\Delta^2 y$	$\Delta^3 y$