

Write a MATLAB user-defined function **PolyInter** for interpolation using polynomials.

$$f(x) = a_m x^m + a_{m-1} x^{m-1} + \dots + a_1 x + a_0$$

function yi= PolyInter(x,y, xi)

Seven data points are:

X	1	3	5	6	9	12	16
f(x)	5	9	12	14	18	24	30

- (a) Use the function to determine the interpolated value for $x=7$
- (b) Plot the data points and your polynomial curve