Tutorial

Newton's divided difference method:

1. Using Newton's divided difference formula, find the value of f(2), f(8) and f(15) given the following table

x:	4	5	7	10	11	13
f(x):	48	100	294	900	1210	2028

2. Determine f(x) as apolynomial in x for the following data, using Newton's divided difference formulae. Also find f(2).

x:	-4	-1	0	2	5
f(x):	1245	33	5	9	1335

Interpolating with a cubic spline:

3. Using cubic spline find y(1.5) & $y^1(1)$

x	1	2	3
y	-8	-1	18