Para la cuadrática

$$f_3(x) = f(x_0) + (x - x_0)\, f[x_1, x_0] + (x - x_0)(x - x_1)\, f[x_2, x_1, x_0]$$
$$+ (x - x_0)(x - x_1)(x - x_2)\, f[x_3, x_2, x_1, x_0]$$

$$f[x_3, x_2, x_1, x_0] = \frac{f[x_3, x_2, x_1] - f[x_3, x_2, x_0]}{x_3 - x_0}$$

$$= \frac{\dfrac{f[x_3, x_2] - f[x_2, x_1]}{x_3 - x_1} - \dfrac{f[x_2, x_1] - f[x_2, x_0]}{x_2 - x_0}}{x_3 - x_0}$$

$$= \frac{\dfrac{\dfrac{f(x_3) - f(x_2)}{x_3 - x_2} - \dfrac{f(x_2) - f(x_1)}{x_2 - x_1}}{x_3 - x_1} - \dfrac{\dfrac{f(x_3) - f(x_2)}{x_3 - x_2} - \dfrac{f(x_2) - f(x_0)}{x_2 - x_0}}{x_3 - x_0}}{x_3 - x_0}$$

$$\Rightarrow \underline{f[x_1, x_0]} = \frac{f(x_1) - f(x_0)}{x_1 - x_0} = \frac{1.386294 - 0}{4 - 1} = \underline{0.462098}$$

$$\Rightarrow f[x_2, x_1, x_0] = \frac{\dfrac{f(x_2) - f(x_1)}{x_2 - x_1} - \dfrac{f(x_1) - f(x_0)}{x_1 - x_0}}{x_2 - x_0} = \underline{-0.0597385}$$

$$\Rightarrow f[x_3, x_2, x_1, x_0] = \frac{\dfrac{0.182314 - \cancel{0.1???381}\ 0.223144}{6 - 4} - \dfrac{0.182314 - 0.402359}{6 - 1}}{6 - 1}$$

$$\underline{f[x_3, x_2, x_1, x_0]} = \frac{0.023594}{6 - 1} = \underline{0.0047188}$$

$$\Rightarrow \underline{f(2) = 0.609888}$$

$$f[x_3, x_2, x_1, x_0] = \frac{-0.020415 - (-0.044009)}{6 - 1} =$$