$M_0 = 0 \quad M_2 = 0 \qquad \lambda_1 \cdot M_0 + 2M_1 + (1-\lambda_1) M_2 = 6 f[x_0, x_1, x_2]$

$\lambda_k = \frac{h_k}{h_k + h_{k+1}}, \; h_k = x_k - x_{k-1}$

$6 f[-1,0,1] = 6 \cdot (-4) = -24 \qquad 2M_1 = -24 \Rightarrow M_1 = -12 \quad h_0 = h_1 = h_2 = 1$

$f_1(x) = \frac{1}{6} M_0 \cdot (-x^3) + \frac{1}{6} M_1 \cdot (x+1)^3 + \left(-1 - \frac{1}{6} M_0\right) \cdot (-x) +$

$+ \left(2 - \frac{1}{6} M_1\right)(x+1) = \frac{1}{6} M_1 (x+1)^3 + x + \left(2 - \frac{1}{6} M_1\right) \cdot (x+1) =$

$= -2(x+1)^3 + x + (2+2)(x+1) = -2(x+1)^3 + 5x + 4 = -2x^3 - 6x^2 - 6x - 2$

$+ 5x + 4 = -2x^3 - 6x^2 - x + 2$

$f_2(x) = \frac{1}{6} M_1 \cdot (1-x)^3 + \frac{1}{6} M_2 \cdot (x-0)^3 + \left(2 - \frac{1}{6} M_1\right) \cdot (1-x) +$

$+ \left(-3 - \frac{1}{6} M_2\right) \cdot (x-0) = -2(1-x)^3 + (2+2)(1-x) + (-3) \cdot x =$

$= -2(1 - 3x + 3x^2 - x^3) + 4 - 4x - 3x = 2x^3 - 6x^2 + 6x - 2 + 4 - 7x =$

$= 2x^3 - 6x^2 - x + 2$