x	f(x)
0	4
2	2,5
x_0 4	6
x_1 6	10,2
8	11,8

$f(5)$

$$f_1(x) = \frac{x-6}{4-6}\,6 + \frac{x-4}{6-4}\,10,2$$

$$f_1(x) = -3x+18 + 5,1x-20,4 = 2,1x-2,4$$

$$f_1(x) = 2,1x - 2,4$$

$$f_1(5) = 8,1$$

$f_2(5) = x_0 = 2 \quad x_1 = 4 \quad x_2 = 6$

$$f_2(5) = \frac{(5-4)(5-6)}{(2-4)(2-6)}\,2,5 + \frac{(5-2)(5-6)}{(4-2)(4-6)}\,6 + \cdots +$$

$$\cdots + \frac{(5-2)(5-4)}{(6-2)(6-4)}\,10,2$$

$$f_2(5) = \frac{-1}{8}\,2,5 + \frac{-3}{-4}\,6 + \frac{3}{8}\,10,2$$

$$f_2(5) = -0,3125 + 4,5 + 3,825$$

$$f_2(5) = 8,0125$$

$f_3(5) = x_0 = 0 \quad x_1 = 2 \quad x_2 = 4 \quad x_3 = 6$

$$f_3(5) = \frac{(5-2)(5-4)(5-6)}{(0-2)(0-4)(0-6)}\,4 + \frac{(5-0)(5-4)(5-6)}{(2-0)(2-4)(2-6)}\,2,5$$

$$+ \frac{(5-0)(5-2)(5-6)}{(4-0)(4-2)(4-6)}\,6 + \frac{(5-0)(5-2)(5-4)}{(6-0)(6-2)(6-4)}\,10,2 =$$

$$f_3(5) = \frac{1}{16}4 + \left(-\frac{5}{16}\right)2{,}5 + \frac{15}{16}6 + \frac{5}{16}10{,}2$$

$$f_3(5) = 0{,}25 - 0{,}78125 + 5{,}625 + 3{,}1875$$

$$f_3(5) = 8{,}28125$$