2.

x	0°	1°	2°
2,4	-2,98	11,8333	-27,3667
2,7	0,57	-1,85	
2,9	0,2		

$$\frac{-2,98-0,57}{2,4-2,7} = \frac{-3,55}{-0,3} = 11,8333$$

$$\frac{0,57-0,2}{2,7-2,9} = \frac{0,37}{-0,2} = -1,85$$

$$\frac{11,8333+1,85}{2,4-2,9} = \frac{13,6833}{-0,5} = -27,3666$$

$f(x) = -2,98+(x-2,4)\times 11,8333+(x-2,4)(x-2,7)-27,3667$

$f(x) = -2,98+(x-2,4)\times 11,8333+(x^2-5,1x+6,48)x-27,3667$

$f(x) = -2,98+(11,8333x-28,4)+(-27,3667x^2+139,57x-177,336)$

$f(x) = -27,3667x^2+151,4633x-208,216$

$f(2,5C) \approx -0,4737$

DOM SEG TER QUA QUI SEX SÁB

4. $h = 0,2$

$$[(f(x_0) + f(x_6)) + 4.(f(x_1) + f(x_3) + f(x_5)) + 2.(f(x_2) + f(x_4))] \cdot \frac{h}{3}$$

$$\frac{0,2}{3}[(4,89 + 5,28) + 4 \times (3,2 + 0,44 + 5,05) + 2 \times (0,83 + 5,61)]$$

$$\frac{0,2}{3}[(4,89 + 5,28) + 4 \times (8,69) + 2 \times (6,44)]$$

$$3.854$$

3.

$$\Sigma y = a_1 n + a_2 \Sigma x + a_3 \Sigma x^2$$
$$\Sigma xy = a_1 \Sigma x + a_2 \Sigma x^2 + a_3 \Sigma x^3$$
$$\Sigma x^2 y = a_1 \Sigma x^2 + a_2 \Sigma x^3 + a_3 \Sigma x^4$$

$$4a_1 + 13,4a_2 + 48,94a^3 = -4,9 \quad (1)$$
$$13,4a_1 + 48,94a_2 + 191,084a_3 = -19,732 \quad (2)$$
$$48,94a_1 + 191,084a_2 + 783,2098a_3 = -77,6548 \quad (3)$$

$$(1) \times 3,35 - (2) = -4,05a_2 - 27,135a_3 = -1,683 \quad (4)$$
$$(1) \times 12,235 - (3) = -27,135a_2 - 189,4289a_3 = -13,2967 \quad (5)$$

$$(4) \times 6,7 - (5) = 2,6244a_3 = 1,0206$$

$$a_3 = \frac{1,0206}{2,6244} = 0,3889$$

$$-4,05a_2 - 27,135(0,3889) = -1,683$$
$$a_2 = \frac{8,8695}{-4,05} = -2,19$$

$$4a_1 + 13,4(-2,19) + 48,94(0,3889) = -4,9$$
$$a_1 = \frac{5,4138}{4} = 1,3534$$