

1.

x	y
1.3	3.2
1.8	4.3
2.6	0.5
3.9	-1.7

$$L_0 = \frac{(x - x_1)(x - x_2)(x - x_3)}{(x_0 - x_1)(x_0 - x_2)(x_0 - x_3)}$$

$$L_1 = \frac{(x - x_0)(x - x_2)(x - x_3)}{(x_1 - x_0)(x_1 - x_2)(x_1 - x_3)}$$

$$L_2 = \frac{(x - x_0)(x - x_1)(x - x_3)}{(x_2 - x_0)(x_2 - x_1)(x_2 - x_3)}$$

$$L_3 = \frac{(x - x_0)(x - x_1)(x - x_2)}{(x_3 - x_0)(x_3 - x_1)(x_3 - x_2)}$$

$$P_3(x) = y_0L_0 + y_1L_1 + y_2L_2 + y_3L_3$$

$$L_0 = \frac{(x - 1.8)(x - 2.6)(x - 3.9)}{(1.3 - 1.8)(1.3 - 2.6)(1.3 - 3.9)}$$

$$L_1 = \frac{(x - 1.3)(x - 2.6)(x - 3.9)}{(1.8 - 1.3)(1.8 - 2.6)(1.8 - 3.9)}$$

$$L_2 = \frac{(x - 1.3)(x - 1.8)(x - 3.9)}{(2.6 - 1.3)(2.6 - 1.8)(2.6 - 3.9)}$$

$$L_3 = \frac{(x - 1.3)(x - 1.8)(x - 2.6)}{(3.9 - 1.3)(3.9 - 1.8)(3.9 - 2.6)}$$

$$P_3(x) = 3.2L_0 + 4.3L_1 + 0.5L_2 + (-1.7)L_3$$