$$E_i = m(x_i) - y_i \qquad E_{TOT} = \sum_i E_i$$

$$E^2 = \sum_i E_i^2$$

$$m(x) = a\overset{2.5}{x} + b$$

x	y	$m(x)$	$\mathcal{E}_i = m(x_i) - y_i$
0	1	$a \cdot 0 + b = b$	$b - 1$
1	1.7	$a \cdot 1 + b$	$a + b - 1.7$
2	2	$a \cdot 2 + b$	$2a + b - 2$
2.5 3	4	$a \cdot 3 + b$	$3a + b - 4$

$$\mathcal{E}^2 = (b-1)^2 + (a+b-1.7)^2 + (2a+b-2)^2 + (3a+b-4)^2$$

$$\mathcal{E}^2(a,b)$$

$$\frac{\partial \mathcal{E}^2}{\partial a} = 0 \qquad \frac{\partial \mathcal{E}^2}{\partial b} = 0$$