$$P_i = (x_i, y_i), (i = 1, 2, \ldots, n)$$

$$\begin{aligned} f(x_i) &= ax_i + b \\ L(a,b) &= \sum_{i=1}^{n} (y_i - f(x_i))^2 \\ f(x) &= \begin{pmatrix} x_i & 1 \end{pmatrix} \begin{pmatrix} a \\ b \end{pmatrix} \end{aligned} \tag{1}$$

$$\begin{cases} f(x_1) = ax_1 + b \\ f(x_2) = ax_2 + b \\ f(x_3) = ax_3 + b \end{cases} \tag{2}$$