$$f(x) = \theta^T x = \sum_{j=1}^{d} \theta_{(j)} x_{(j)}$$

$x_i \in \mathbb{R}^d$ (assume that $(x_i)_{(1)} = 1$ for every example) $\quad \theta \in \mathbb{R}^d$

The weights ($\theta_{(j)}$) are multiplied with their corresponding features ($x_{(j)}$). The predicted target is a sum of all the products. E.g., To predict your relationship with movies, we multiply your weights (how much you like actions or comedies) and movies themselves' features and add them together.