

1.2.

$$h(x) = \text{Sign}(w^T x) = +1$$

$$\text{Sign}(w^T x) = -1$$

$$w^T x = 0$$

$$x_0 w_0 + x_1 w_1 + x_2 w_2 = 0$$

$$w_0 + x_1 w_1 + x_2 w_2 = 0$$

$$x_2 w_2 = -w_0 - x_1 w_1$$

This can be written as

$$x_2 w_2 = -x_1 w_1 - w_0$$

$$x_2 = \frac{-x_1 w_1 - w_0}{w_2}$$

Now, this is in the format of $y = mx + b$

Therefore the slope

$$m = -\frac{w_1}{w_2}$$