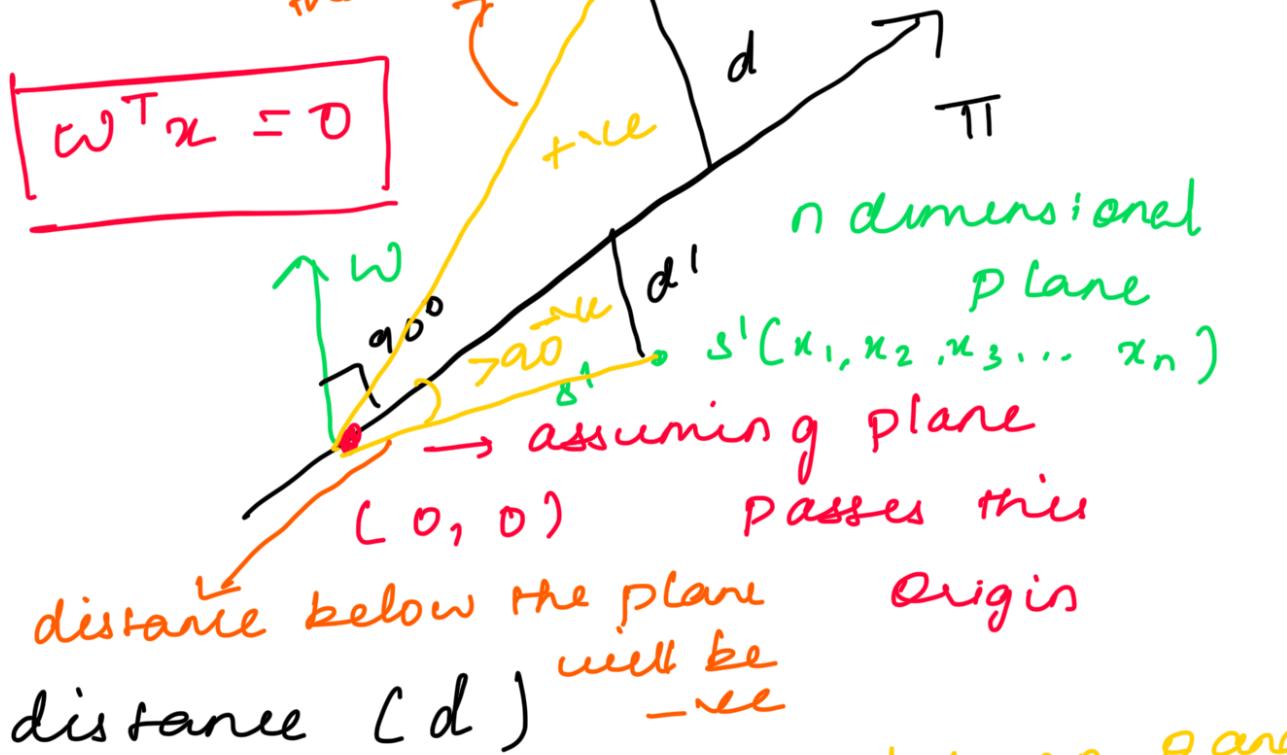


Distance of a point from plane

distance above the plane will be +ve
 $s(x_1, x_2, x_3, \dots, x_n)$

$$\boxed{w^T x = 0}$$



$$\boxed{d = \frac{w^T s}{\|w\|}}$$

$$\theta = \text{between } \theta \text{ and } 90^\circ$$

$$\Rightarrow w^T s = \|w\| \|s\| \cos \theta$$

\Downarrow
 + ve value

$$\boxed{d = \frac{w^T s'}{\|w\|}} \Rightarrow w^T s' = \|w\| \|s'\| \cos \theta$$

\Downarrow

$\theta = > 90$

↳

- ve value