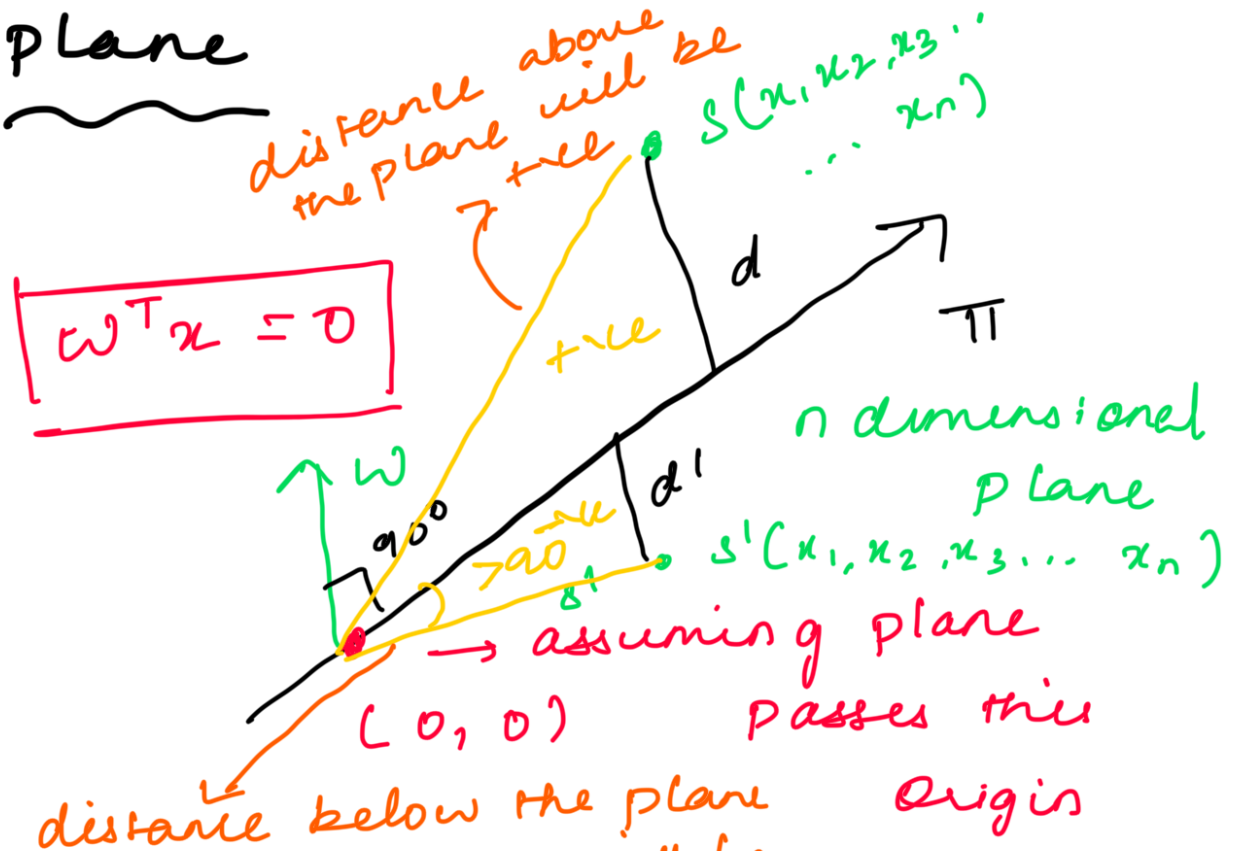
Distance of a point from plane



$w^T x = 0$

distance (d)

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

θ = between 0 and 90

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

$\|$

+ve value

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

$\|$

@ = >90

⇓

– ve value