



$\|w\|$ non so
se $z' = 1$

$$z' = z - \gamma \cdot \frac{w}{\|w\|}$$

(2) $w^T z' + w_0 = 0 \rightarrow w^T \left(z - \gamma \frac{w}{\|w\|} \right) + w_0 = 0 \rightarrow \underbrace{w^T z + w_0}_{(1)} - \underbrace{w^T \gamma \frac{w}{\|w\|}}_{= 1} = 0$

$1 = \gamma \frac{w^T \cdot w}{\|w\|}$
 $= \gamma \frac{\|w\|^2}{\|w\|}$
 $\Rightarrow \gamma = \frac{1}{\|w\|}$

