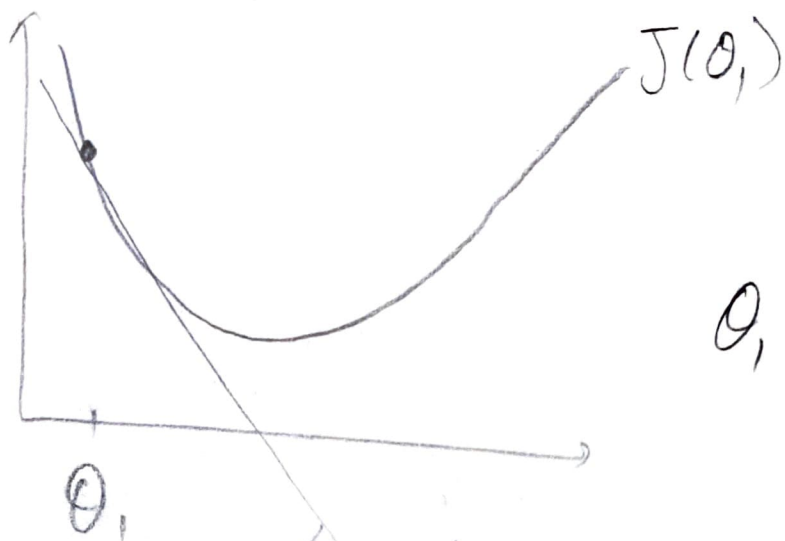


$$\theta_{1,0} = \theta_1 - \underbrace{\alpha}_{\rightarrow 0 \text{ (ve)}} (+ve) \rightarrow -ve \text{ dec}^n \downarrow$$



$$\frac{d}{d\theta_1} J(\theta_1)$$

+ve

$$\theta_{1,0} = \theta_1 - \underbrace{\alpha}_{+ve} (-ve)$$

+ve

incⁿ ↑

$$\theta_{1,0} = \theta_1 - \alpha \frac{\partial}{\partial \theta_1} J(\theta_1)$$

if α is small



if α is large

