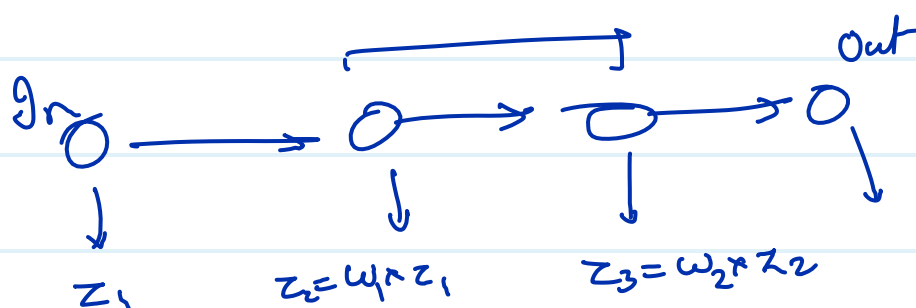


→ weights — } ←  
 → bias — } ←  
 → activation func ←

$$x \rightarrow \underline{af} \left[ \underbrace{(\omega \times x_1) + b}_{\text{learning}} \right]$$

Activation function  $\leftarrow$  Non linearity.

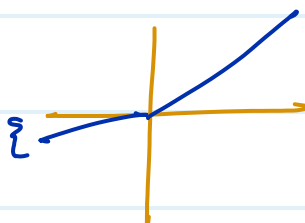


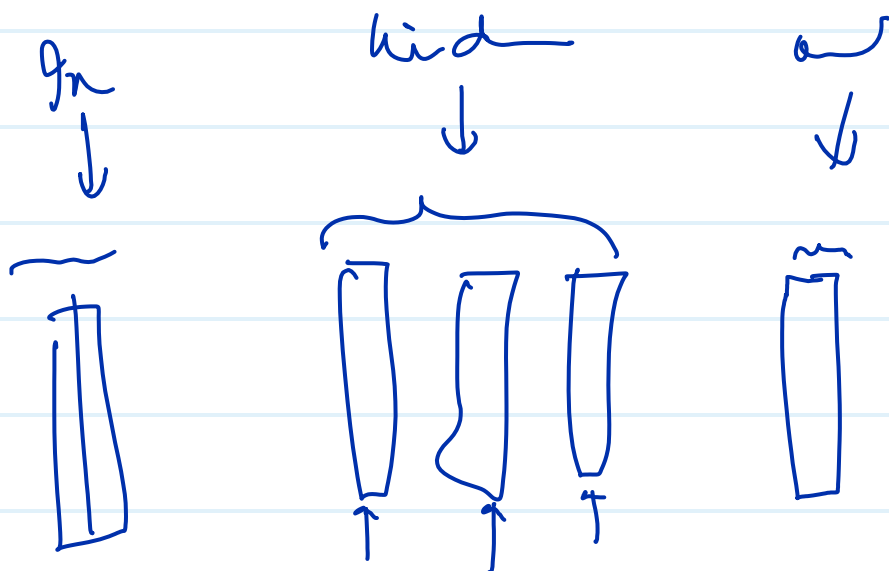
1) Sigmoid  $\rightarrow$  Binary  $\rightarrow$  Binary.  
(0, 1)

2) Tanh  $\rightarrow$   $(-1, 1)$   $\rightarrow$  Shallow NN

\* 3) ReLU  $\rightarrow$   $\max(0, x)$   $\rightarrow$   $\left( \frac{d}{dx} \right) \times \frac{d}{dx} \times \frac{d}{dx} \dots$

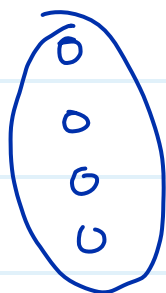
4) Leaky ReLU  $\rightarrow$





1. Dense  $\rightarrow$  Normal  $\rightarrow$  Refines your Weights.

2. Dropout  $\rightarrow$   $\leftarrow 0.2 \rightarrow$  Helps in overfitting.



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728  $\rightarrow 2/3 \rightarrow 2^n$

