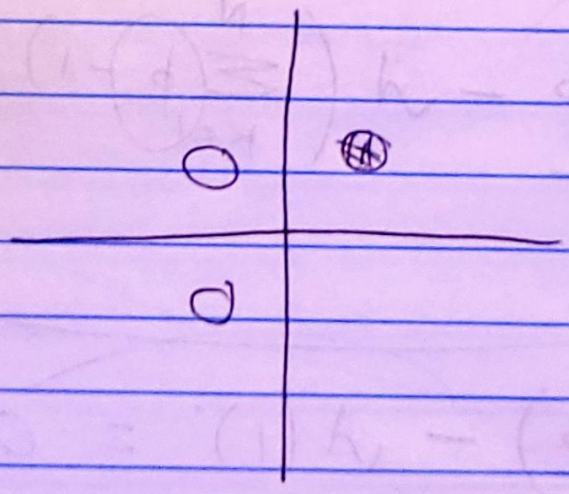
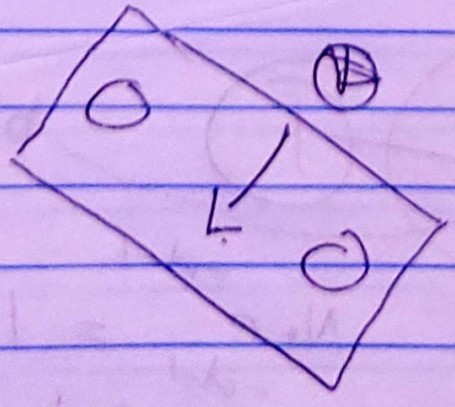
④

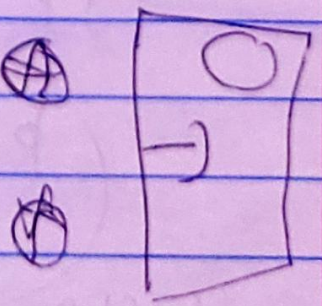
⇒ The VC Dimension of an axis-aligned Square in a 2d plane is 3

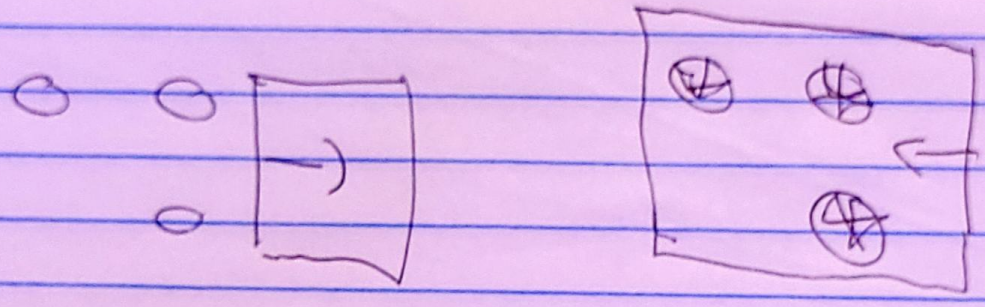
→ Consider a x,y coordinate system in which there are 3 dots in first 3 quadrants



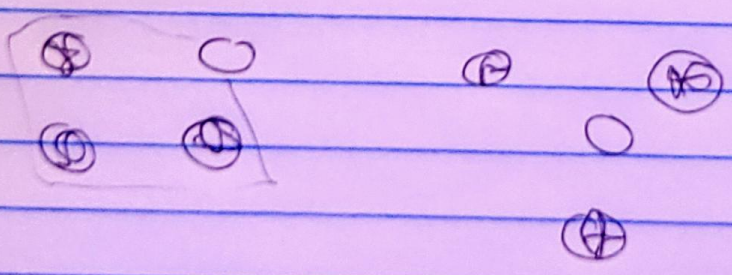
Now, For a given function f(x,0), you can correctly classify the following distribution







But when there's a 4th point, It cannot be labelled correctly in most of the cases



Thus the VC-dimensions of axis aligned square in the Plane is 3 as No sets of 4 points can be fully shattered