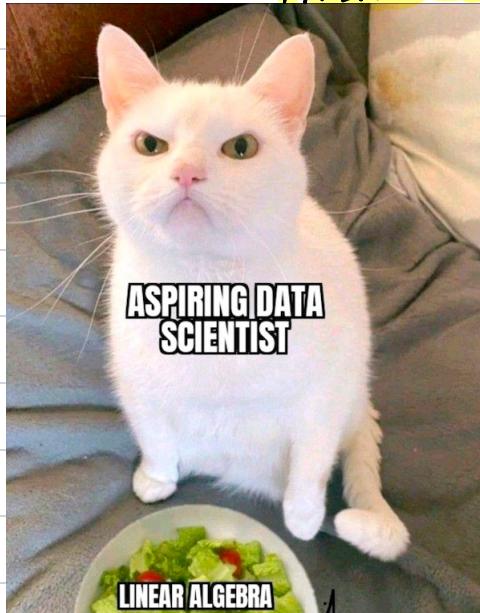


Session 5

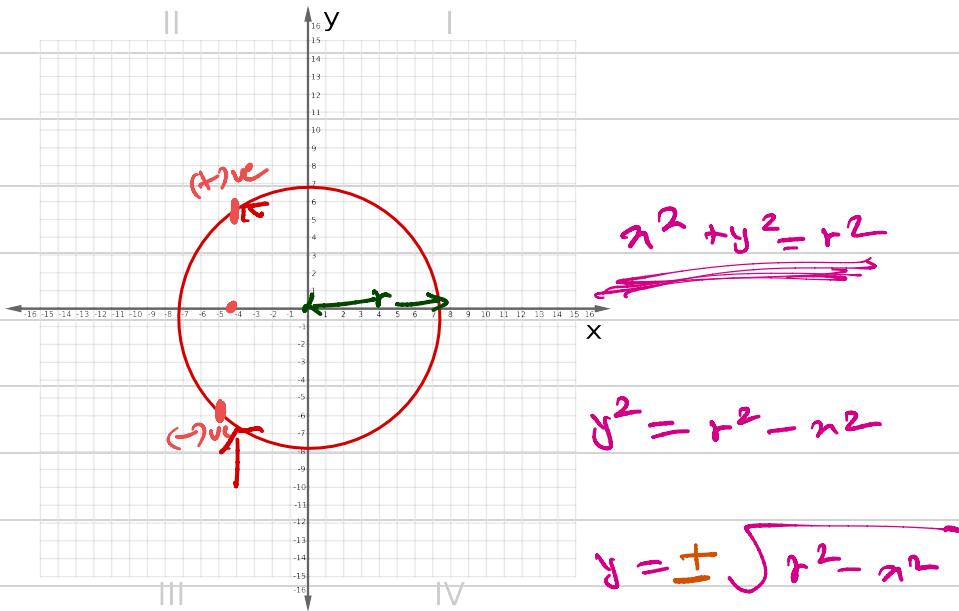
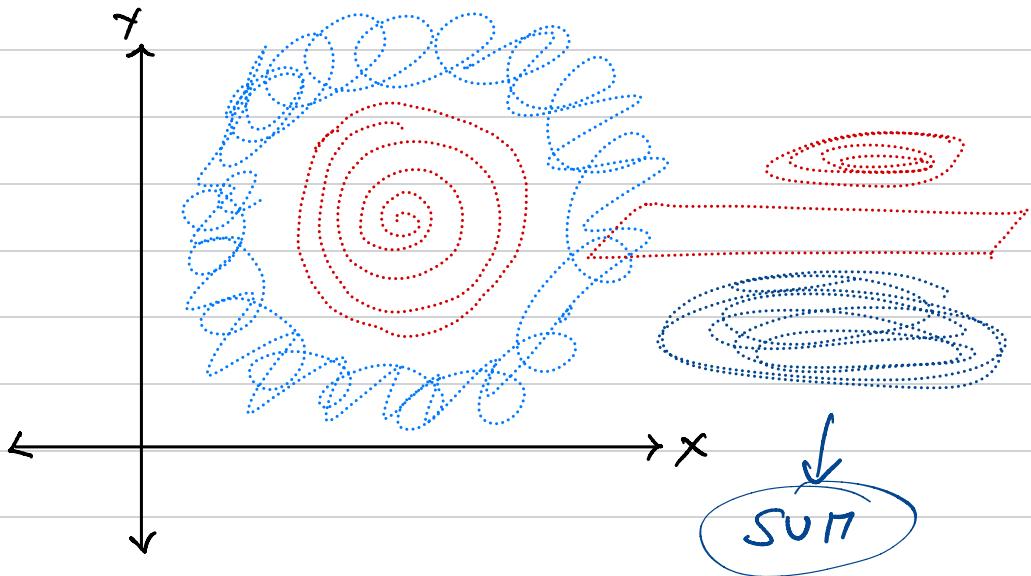
LINEAR ALGEBRA -5 PROBLEM SOLVING SESSION

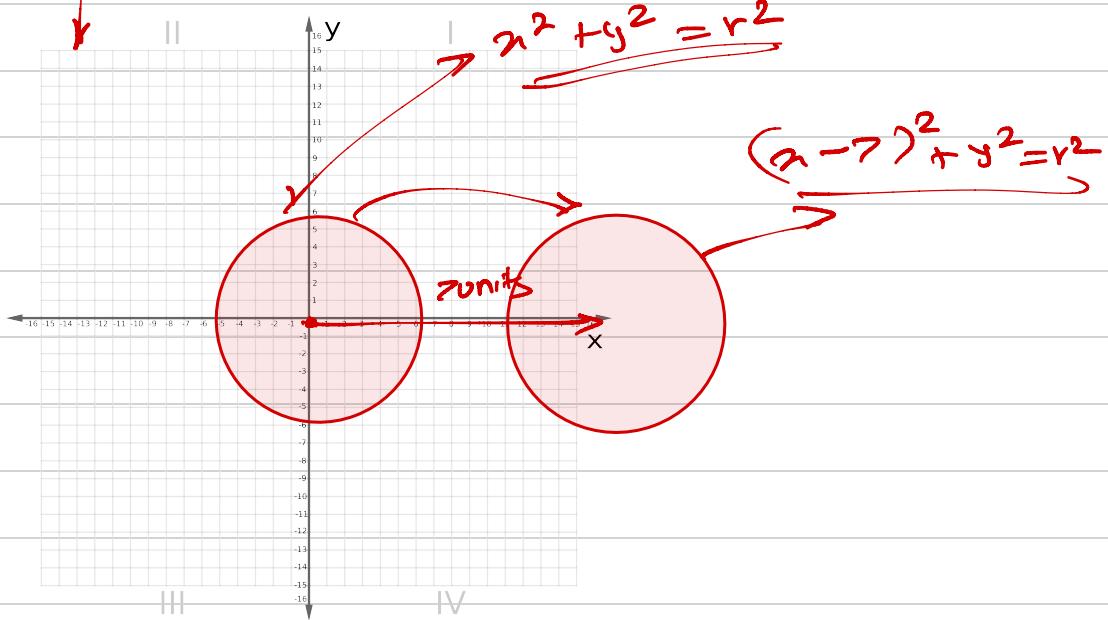
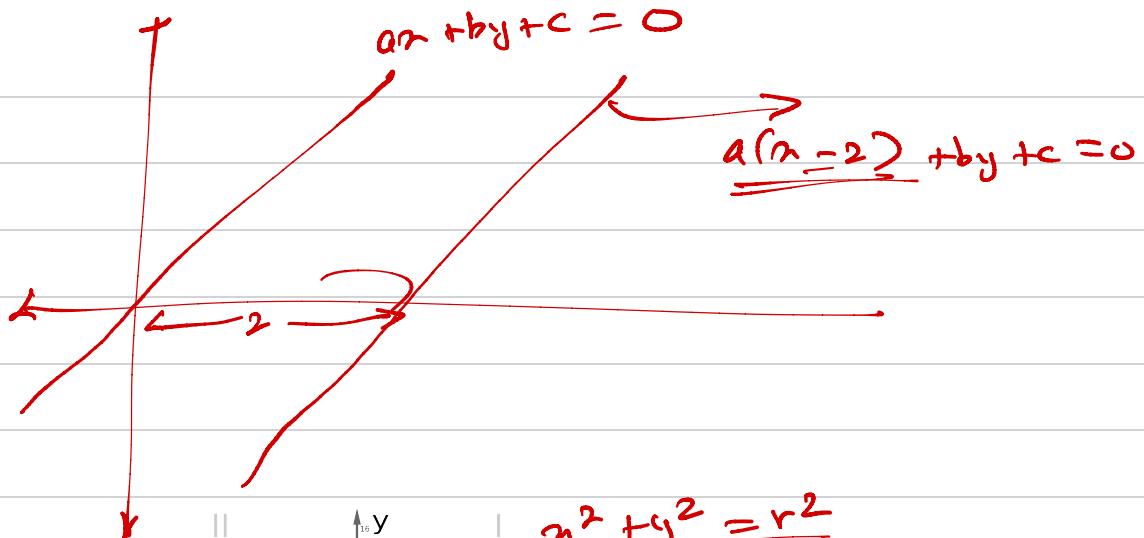
Feb 06, 2024



ProgrammerHumor.io

CIRCLE



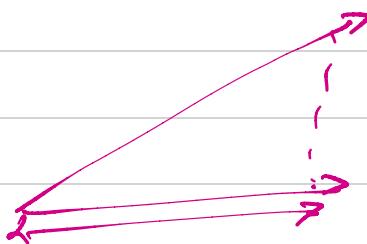
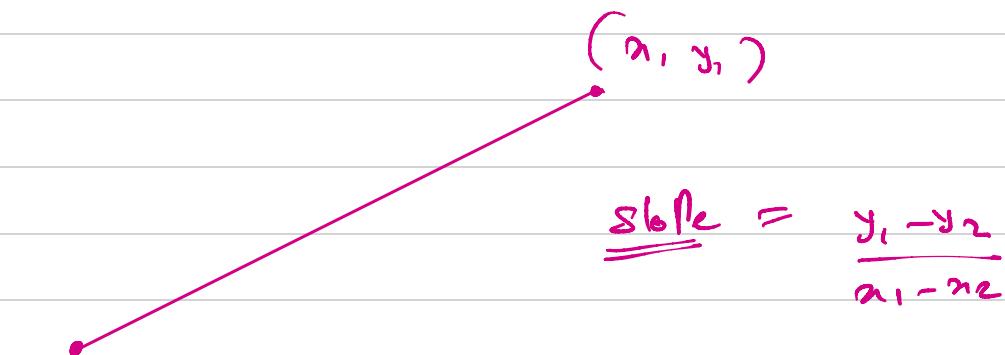
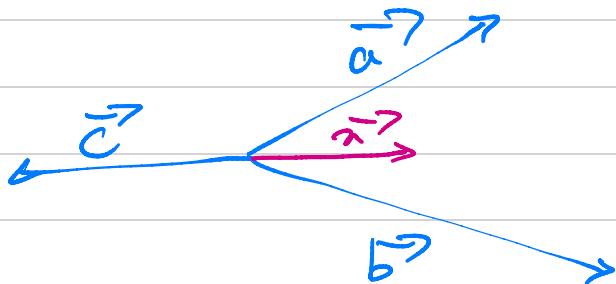


$$x^2 + y^2 = r^2$$

$$x^2 + y^2 + z^2 = r^2 \rightarrow \text{Hyper-sphere-3D}$$

$$x^2 + y^2 + z^2 + t^2 = r^2 \rightarrow \text{4D-Hyper-Paraboloid}$$

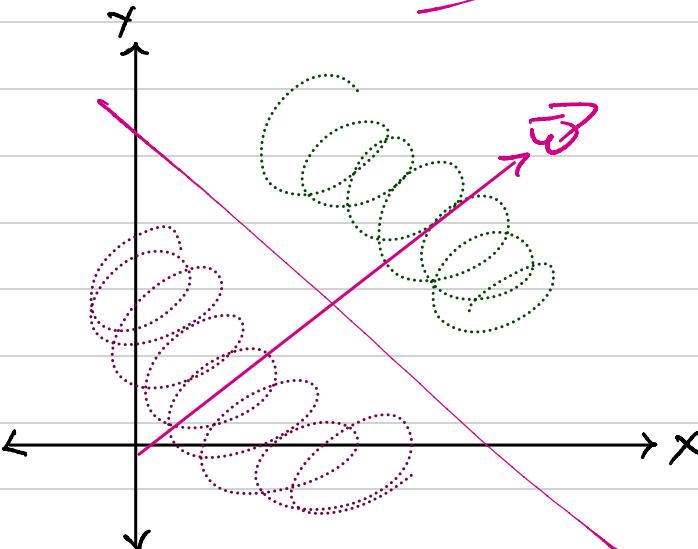
Few more rules of Vector



$$f(x) \quad [d] \quad f \quad [d] \quad x \quad , \quad]$$

(1)

PERCEPTRON

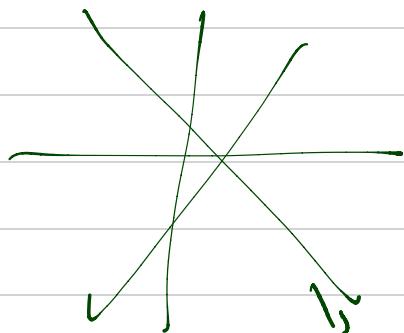


When you get the algorithm but not the math behind it



$$w_0 + w_1x_1 + w_2x_2 = 0$$

$$\underline{w_0} + \underline{w_1}x_1 + \underline{w_2}x_2 + \underline{w_0} = 0$$

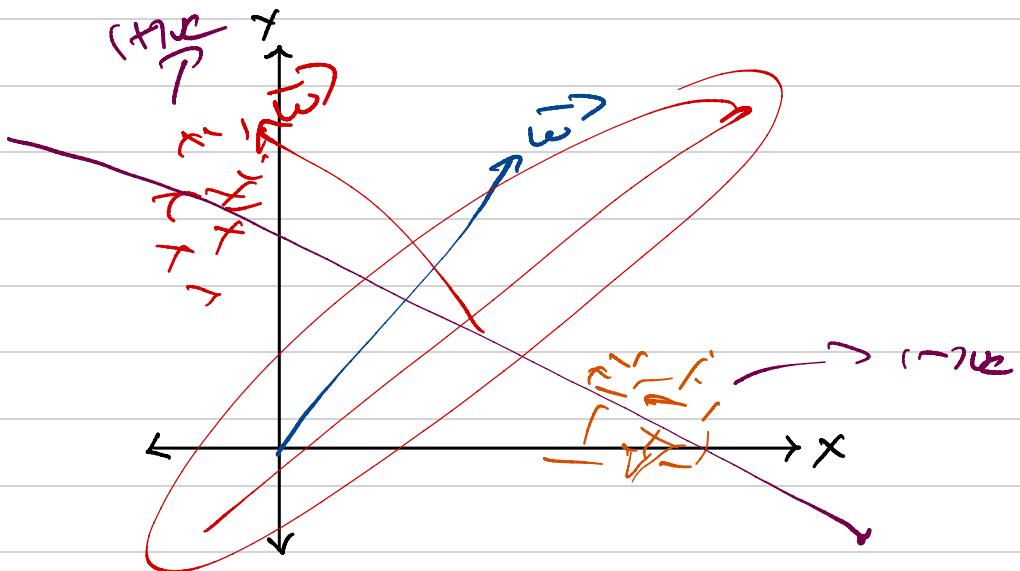
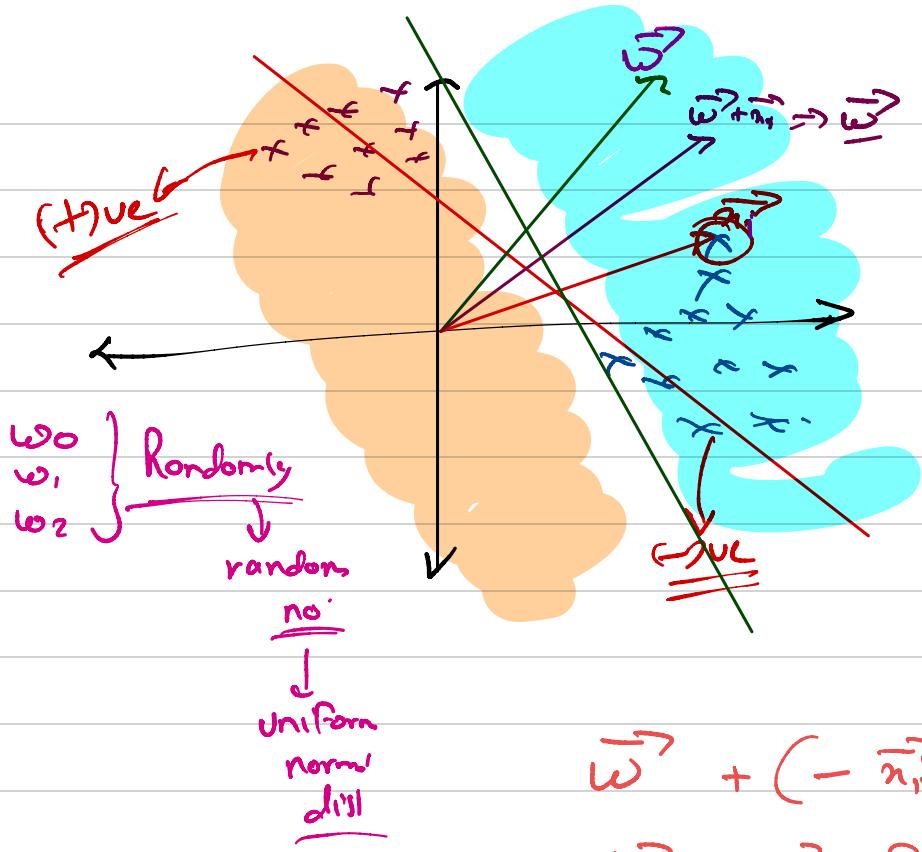


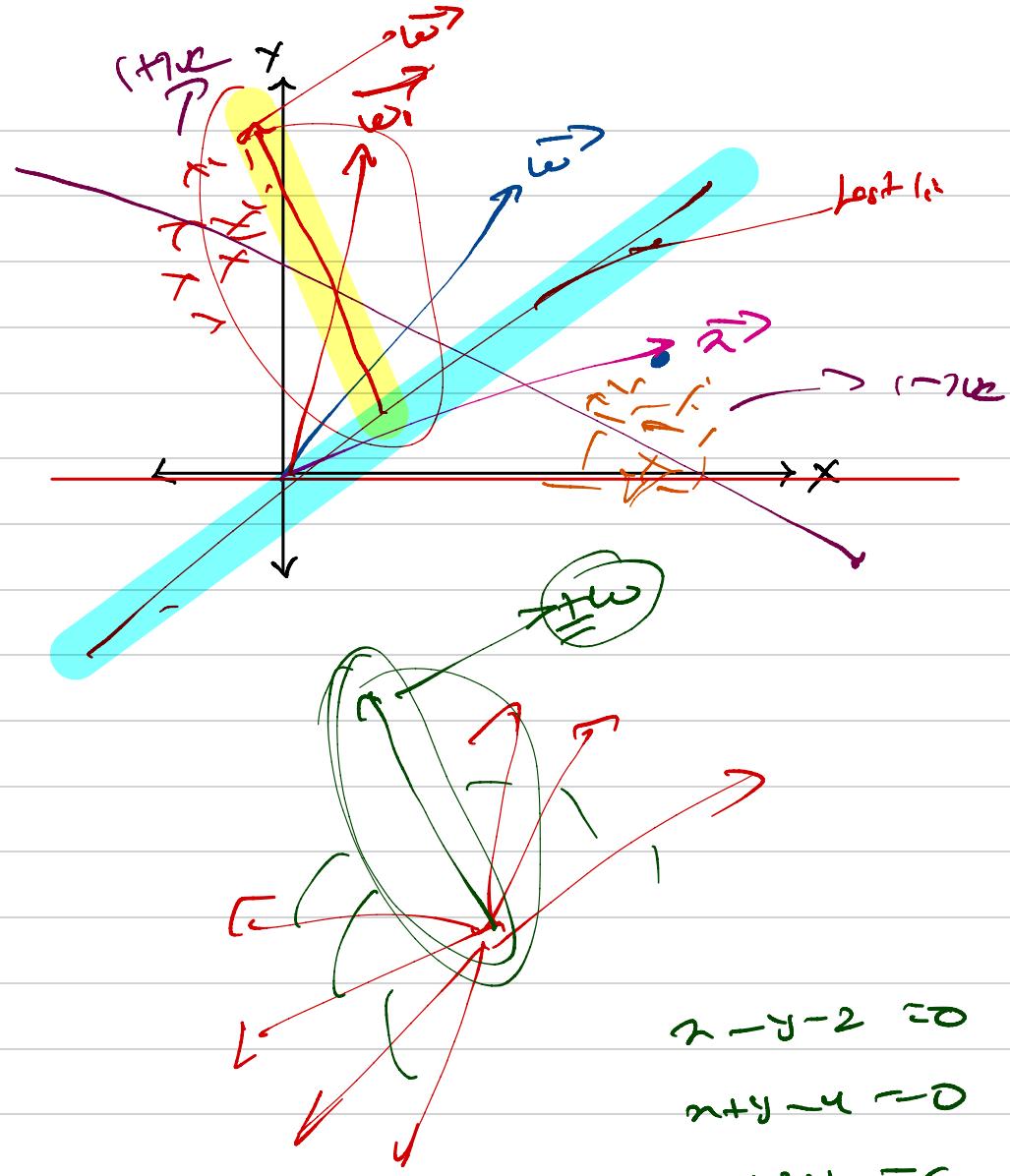
→ Catch → if it can

gives you the line that separates

both class of point →

doesn't guarantee
best fit





(3, 1)

