

Use the perceptron algorithm to find the hyperplane separating the two classes and then draw the picture in 2D showing the corresponding line separating the instances.

Instance	a1	a2	class
1	1	3	1
2	1	1	-1
3	2	4	1
4	2	2	-1

Instance	Class			Class	Correct?	action
(a0, a1, a2)	y <sub>actual</sub>	(w0, w1, w2)	dot product	y <sub>predicted</sub>		$\mathbf{w} = \mathbf{w} + \mathbf{y}_a * \mathbf{a}$

