# Chapter :1

## Resources

<https://openlearninglibrary.mit.edu/courses/course-v1:MITx+6.036+1T2019/course/>

<https://openlearninglibrary.mit.edu/courses/course-v1:MITx+6.036+1T2019/courseware/Week1/week1_exercises/?activate_block_id=block-v1%3AMITx%2B6.036%2B1T2019%2Btype%40sequential%2Bblock%40week1_exercises>

<https://openlearninglibrary.mit.edu/courses/course-v1:MITx+6.036+1T2019/courseware/Week1/week1_homework/?activate_block_id=block-v1%3AMITx%2B6.036%2B1T2019%2Btype%40sequential%2Bblock%40week1_homework>

<https://mathworld.wolfram.com/Point-PlaneDistance.html>

**Linear Classifier - Using sign function as classifier and 0/1 Loss function**

**Classifier** :

h(X;Th,Tho) ***= sign***( ThTX + Th0)

**Loss Function** :

e = 1 ***sum***( 0 if y(i) != h(i)  )

n 1 otherwise