

Training Set

Feature 1	Feature 2	Label
9	5	1
7	1	1
8	2	1
7	3	2
9	4	2
3	3	2
-1	1	3
1	-2	3
2	-1	3

Q1) Given the above training set, Use **K-Nearest Neighbor** with **Manhattan Distance** to classify the following test points:

Feature 1	Feature 2	Label
8	3	?
1	2	?

- a) If K = 3
- b) If K = 5

Q2) List two real problems that you can use machine learning to solve and state what type of learning (Supervised, Unsupervised, and Reinforcement learning) do they need?