

## WARM-UP: KNN

The table below provides a training data set containing five observations, two numerical predictors, and one categorical response variable.

Obs.	$X_1$	$X_2$	$Y$
1	2	210	Orange
2	0	90	Blue
3	1	-23	Orange
4	0	180	Blue
5	1.2	312	Orange

1. Using K Nearest Neighbors with  $K = 2$ , based on Euclidean distance, predict the class of a new test observation with  $x_1 = -1$ ;  $x_2 = 255$ . It may be helpful to sketch scatterplot of this data.

2. Does this method incorporate the information of each predictor equally? If so, how? If not, how would you tweak the method so that it does?