(1) This is a closed book, closed notes exam. Switch off your cell phone and do not communicate with anyone other than an exam proctor.

(2) Start writing when instructed. Stop writing when your time is up.

(3) When you are ready to submit, please stay in your seat and raise your hand.

(1) (10 Points) Consider the following labeled training dataset:

\[((0, 0), 1), ((2, 2), 0), ((-1, -2), 0)\]

Draw the decision boundary of the 1-nearest neighbor classifier on this training data. Assume that the distance used to determine neighbors is the usual Euclidean distance. Clearly label the regions that the classifier marks as 0 and 1, and write down the equations corresponding to each section of the decision boundary.