

### 3.1 [0.5/1]

The solution is mostly correct

Realizability assumption is used which is the key element of the solution, but there should be more explanation of why A does not mislabel any negative examples. You can explain that by saying/showing that the rectangle produced by A should be inside of the rectangle from the realizability assumption.

### 3.2 [1/1]

The solution is correct.

The phrase “ $R^*$  is an arbitrary rectangle generated” is a bit weird, since it is the rectangle that generates the labels and it is not arbitrary with respect to those labels. The more appropriate explanation for why  $R(S) \subseteq R^*$  would be just citing the solution from Part 1 of the exercise.

The rest of the solution is correct and contains proper citations.

### 3.3 [0.5/1]

The answer is correct, but there should be more explanation on how the  $R^d$  case corresponds to the  $R^2$  case. How do you define  $R_i$  in the d-dimensional case? How many  $R_i$  do you have? Answers to those two questions explain where does the 2d in the answer come from, however they are not addressed in the solution.

### 3.4 [0.5/1]

It is shown that the runtime of applying the algorithm A mentioned earlier is polynomial in d, but there is no mention of  $\frac{1}{\epsilon}$  or  $\log(\frac{1}{\delta})$ .

Total: 2.5/4