1. Questions 1 to 5 refer to the following scenario: 1 point

Suppose a binary classifier produced the following confusion matrix.

	Predicted Positive	Predicted Negative
Actual Positive	5600	40
Actual Negative	1900	2460

What is the precision of this classifier? Round your answer to 2 decimal places.

0.75

2. Refer to the scenario presented in Question 1 to answer the following: 1 point

(True/False) This classifier is better than random guessing.

- (●) True
- ( ) False

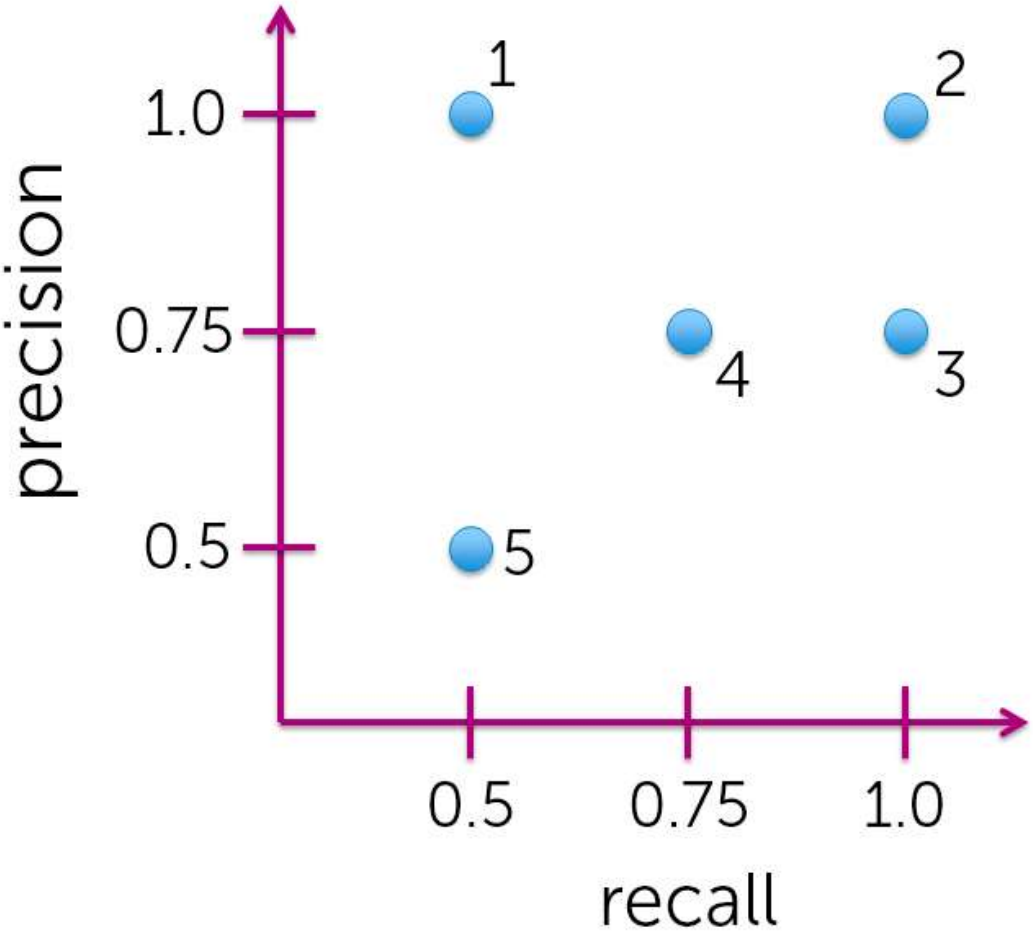
3. Refer to the scenario presented in Question 1 to answer the following: 1 point

(True/False) This classifier is better than the majority class classifier.

- (●) True
- ( ) False

4. Refer to the scenario presented in Question 1 to answer the following: 1 point

Which of the following points in the precision-recall space corresponds to this classifier?



- ( ) (1)
- ( ) (2)
- (•) (3)
- ( ) (4)
- ( ) (5)

5. Refer to the scenario presented in Question 1 to answer the following: 1 point

Which of the following best describes this classifier?

- (•) It is optimistic
- ( ) It is pessimistic
- ( ) None of the above

6. Suppose we are fitting a logistic regression model on a dataset where the vast majority of the data points are labeled as positive. To compensate for overfitting to the dominant class, we should 1 point

- (•) Require higher confidence level for positive predictions
- ( ) Require lower confidence level for positive predictions

7. 1 point

It is often the case that false positives and false negatives incur different costs. In situations where false negatives cost much more than false positives, we should

- ○ Require higher confidence level for positive predictions
- ◉ Require lower confidence level for positive predictions

8. 1 point

We are interested in reducing the number of false negatives. Which of the following metrics should we primarily look at?

- ○ Accuracy
- ○ Precision
- ◉ Recall

9. Suppose we set the threshold for positive predictions at 0.9. What is the lowest score that is classified as positive? Round your answer to 2 decimal places. 1 point

2.20