

From Regression to Classification

TOTAL POINTS 4

1. What is a decision boundary?

1 / 1 point

- ☐ The border at which you must choose your destiny
- ☐ The function that returns the correct class for a given example
- ☒ The line separating one class from another
- ☐ The function that chooses the best action

✓ Correct

2. What does a transfer function do?

1 / 1 point

- ☐ Lets you use regression for classification
- ☐ It depends, what do you want it to do?
- ☒ Converts the output of a regression function to a class label
- ☐ Translates an example from one class to another.
- ☐ Distance between points in the same class
- ☐ Magnitude of errors
- ☐ Direction of misclassifications
- ☒ Number of misclassifications

✓ Correct

4. When can you use the perceptron classifier?

1 / 1 point

- ☐ When you're classifying observations
- ☐ When you are using a neural network
- ☐ Whenever you feel like it
- ☐ It depends
- ☐ Distance between points in the same class
- ☐ Magnitude of errors
- ☐ Direction of misclassifications
- ☒ Number of misclassifications

✓ Correct

4. When can you use the perceptron classifier?

1 / 1 point

- ☐ When you're classifying observations
- ☐ When you are using a neural network
- ☐ Whenever you feel like it
- ☐ It depends
- ☒ When the classes are linearly separable
- ☐ When the decision boundary is flat
- ☐ When the optimization function is differentiable

✓ Correct

Correct! The perceptron classification algorithm will only be successful when the classes are completely linearly separable.