✓ **Congratulations! You passed!**
TO PASS 80% or higher

Keep Learning

GRADE
100%

Module 4 Quiz

LATEST SUBMISSION GRADE

100%

1. Which of the following is an example of clustering?

1 / 1 point

✓ Correct

2. Which of the following are advantages to using decision trees over other models? (Select all that apply)

1 / 1 point

✓ Correct

3. What is the main reason that each tree of a random forest only looks at a random subset of the features when building each node?

1 / 1 point

✓ Correct

4. Which of the following supervised machine learning methods are greatly affected by feature scaling? (Select all that apply)
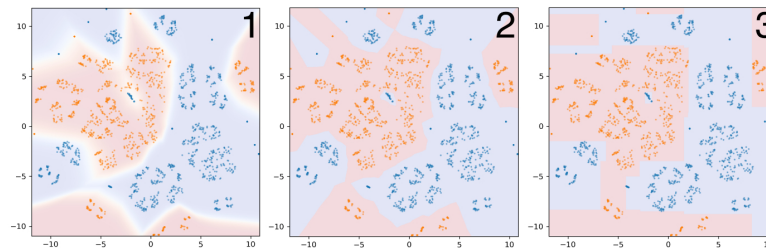
1 / 1 point

✓ Correct

5. Select which of the following statements are true.

1 / 1 point

✓ Correct

6. Match each of the prediction probabilities decision boundaries visualized below with the model that created them.
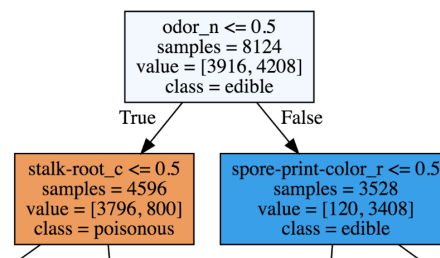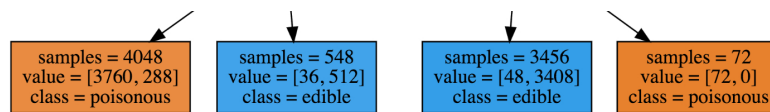
1 / 1 point

✓ Correct

7. A decision tree of depth 2 is visualized below. Using the `value` attribute of each leaf, find the accuracy score for the tree of depth 2 and the accuracy score for a tree of depth 1.

samples = 4048	samples = 548	samples = 3456	samples = 72
value = $[3760, 288]$	value = $[36, 512]$	value = $[48, 3408]$	value = $[72, 0]$
class = poisonous	class = edible	class = edible	class = poisonous

What is the improvement in accuracy between the model of depth 1 and the model of depth 2? (i.e. accuracy2 - accuracy1)

✓ **Correct**

8. For the autograded assignment in this module, you will create a classifier to predict whether a given blight ticket will be paid on time (See the module 4 assignment notebook for a more detailed description). Which of the following features should be removed from the training of the model to prevent data leakage? (Select all that apply)

   1 / 1 point

✓ **Correct**

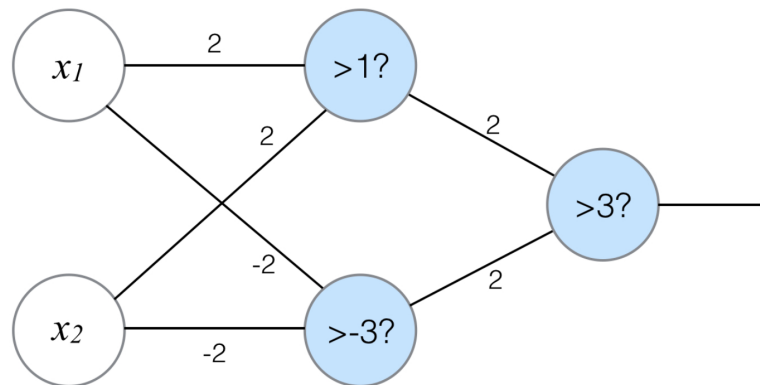9. Which of the following might be good ways to help prevent a data leakage situation?

   1 / 1 point

✓ **Correct**

10. Given the neural network below, find the correct outputs for the given values of x1 and x2.

    1 / 1 point

    The neurons that are shaded have an activation threshold, e.g. the neuron with *>1?* will be activated and output 1 if the input is greater than 1 and will output 0 otherwise.

✓ **Correct**