

1. (1 pt.) **True or False:** Black-box machine learning models can be hacked without the designers or users of the model being aware.

True

2. (1 pt.) **True or False:** Black-box machine learning models are appropriate for use in regulated dealings in financial services such as credit scoring.

False

3. (2 pts.) Name two open source interpretable machine learning packages.

Any of: scikit-learn, rpart, XGBoost, gam, glmnet, h2o, quantreg, RuleFit, arules, FP-Growth

4. (1 pt.) **True or False:** Complex, opaque feature engineering techniques are useful for interpretable machine learning.

False

5. (1 pt.) **True or False:** There are no highly accurate, nonlinear, and also interpretable machine learning models.

False

6. (1 pt.) **True or False:** Post-hoc explanatory techniques can be combined with directly interpretable machine learning models.

True

7. (1 pt.) **True or False:** A surrogate model is a simple, interpretable model of another more complex model.

True

8. (3 pts.) Name three techniques for generating local variable importance values.

Shapley, LIME, TreeInterpreter

9. (1 pt.) **True or False:** It's impossible to assess the observational fairness of a machine learning model's predictions across demographic groups.

False