# Graded Quiz: Model Refinement

**TOTAL POINTS 5**

1. What is the output of the following code? 1 point

```
cross_val_predict (lr2e, x_data, y_data, cv=3)
```

- (●) The predicted values of the test data using cross-validation
- ( ) The average R^2 on the test data for each of the two folds
- ( ) This function finds the free parameter alpha

2. What dictionary value would we use to perform a grid search to determine if normalization should be used and for testing the following values of alpha? 1,10, 100 1 point

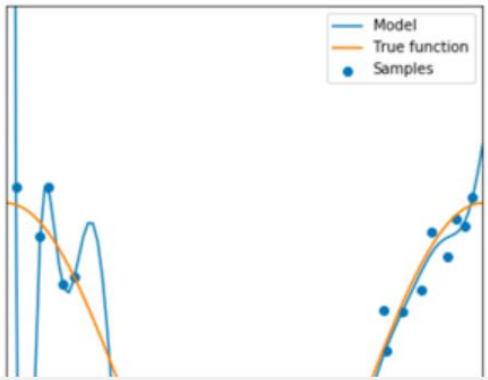
- ( )
```
alpha=[1,10,100]
normalize=[True,False]
```
- (●)
```
[{'alpha':[1,10,100],'normalize':[True,False]} ]
```

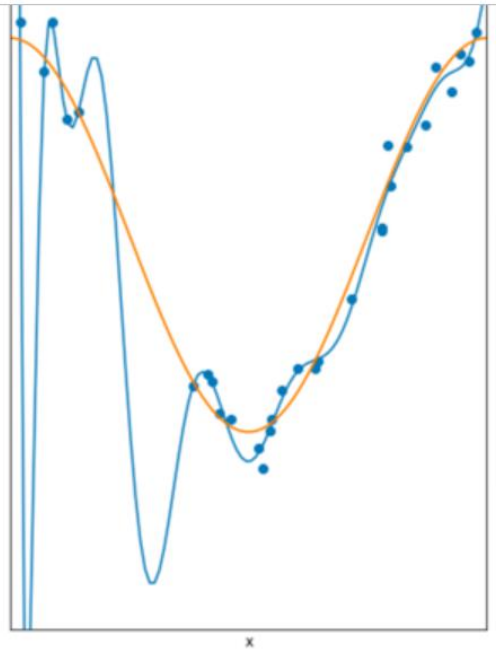
```
{'alpha': [1,10,100]}]
```

3. You train a ridge regression model, you get a R^2 of 1 on your training data and you get a R^2 of 0 on your validation data; what should you do? 1 point

- Your model is under fitting; so perform a polynomial transform
- Nothing, your model performs flawlessly on your validation data
- Your model is overfitting, so increase the parameter alpha

4. The following is an example of what? 1 point

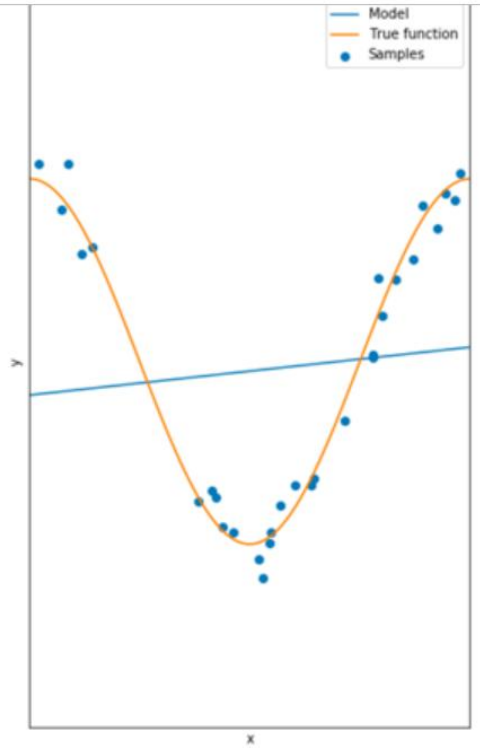





- ○ Perfect fit
- ○ Underfitting
- ◉ Overfitting

5. The following is an example of what? 1 point

Degree 1




- ○ Overfitting
- ○ Perfect fit
- ◉ Underfitting