# Graded Review Questions

## Graded Review Questions Instructions

1. Time allowed: **Unlimited**

- We encourage you to go back and review the materials to find the right answer
- Please remember that the Review Questions are worth 50% of your final mark.

2. Attempts per question:

- One attempt - For True/False questions
- Two attempts - For any question other than True/False

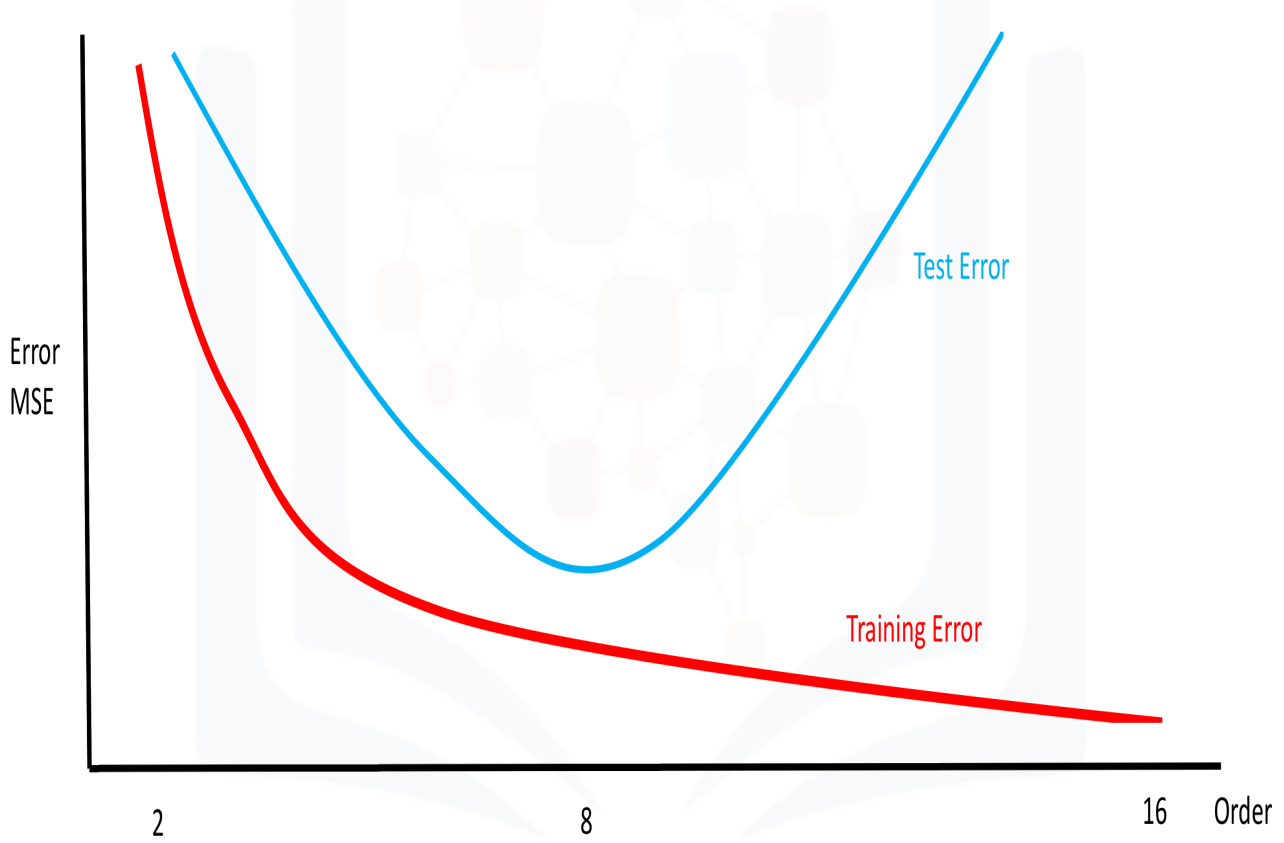
3. Clicking the "**Final Check**" button when it appears, means your submission is **FINAL**. You will **NOT** be able to resubmit your answer for that question ever again

4. Check your grades in the course at any time by clicking on the "Progress" ta

## Question 1

1/1 point (graded)

In the following plot, the vertical axis shows the mean square error and the horizontal axis represents the order of the polynomial. The red line represents the training error the blue line is the test error. What is the best order of the polynomial given the possible choices in the horizontal axis?




- [ ] 2
- [x] 8
- [ ] 16

Submit You have used 1 of 2 attempts

✔ Correct (1/1 point)

## Question 2

1/1 point (graded)

What is the correct use of the "train_test_split" function such that 40% of the data samples will be utilized for testing; the parameter "random_state" is set to zero; and the input variables for the features and targets are_data, y_data respectively?

- [ ] train_test_split(x_data, y_data, test_size=0, random_state=0.4)

- [x] train_test_split(x_data, y_data, test_size=0.4, random_state=0)
- [ ] train_test_split(x_data, y_data)

✔

Submit You have used 1 of 2 attempts

✔ Correct (1/1 point)

## Questions 3

1/1 point (graded)

What is the output of `cross_val_score(lre, x_data, y_data, cv=2)`?

- [ ] The predicted values of the test data using cross-validation.
- [x] The average R^2 on the test data for each of the two folds.
- [ ] This function finds the free parameter alpha.

✔

Submit You have used 1 of 2 attempts

✔ Correct (1/1 point)

## Question 4

1/1 point (graded)

What is the code to create a ridge regression object "RR" with an alpha term equal 10?

- [ ] RR=LinearRegression(alpha=10)
- [x] RR=Ridge(alpha=10)

RR=Ridge(alpha=1)

✔

Submit You have used 1 of 2 attempts

✔ Correct (1/1 point)

## Question 5

1/1 point (graded)

What dictionary value would we use to perform a grid search for the following values of alpha: 1,10, 100? No other parameter values should be tested.

alpha=[1,10,100]

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

[{'alpha': [0.001,0.1,1, 10, 100, 1000,10000,100000,100000],'normalize': [True,False]} ]

✔

Submit You have used 1 of 2 attempts

✔ Correct (1/1 point)