

Regression quiz 2nd attempt score 88% | Coursera

Regression

8/9 points earned (88%)

Quiz passed!

[Back to Week 2](#)

1. Which figure represents an overfitted model?

1 / 1
points

2. ***True or false:*** The model that best minimizes training

1 / 1

points

error is the one that will perform best for the task of prediction on new data.

1 / 1
points

3. The following table illustrates the results of evaluating 4 models with different parameter choices on some data set. Which of the following models fits this data the best?

Model index	Parameters (intercept, slope)	Residual sum of squares (RSS)

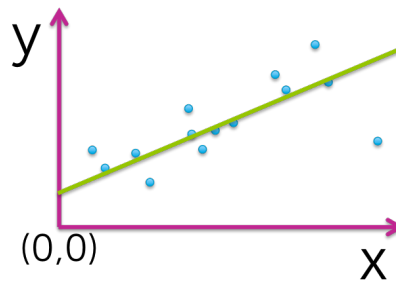
1	(0,1.4)	20.51
2	(3.1,1.4)	15.23
3	(2.7, 1.9)	13.67
4	(0, 2.3)	18.99

4.

1 / 1
points

Assume we fit the following quadratic function: $f(x) = w_0 + w_1 \cdot x + w_2 \cdot (x^2)$ to the dataset shown (blue circles). The fitted function is shown by the green curve in the picture below. Out of the 3 parameters of the fitted function (w_0 , w_1 , w_2), which ones are

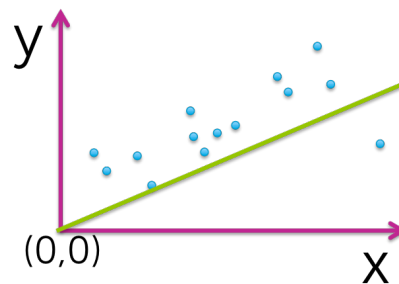
estimated to be 0?
(Note: you must
select all
parameters
estimated as 0 to
get the question
correct.)



-
5. Assume we fit the following quadratic function:
 $f(x) = w_0 + w_1 * x + w_2 * (x^2)$ to the dataset shown (blue circles). The fitted function is

0 / 1
points

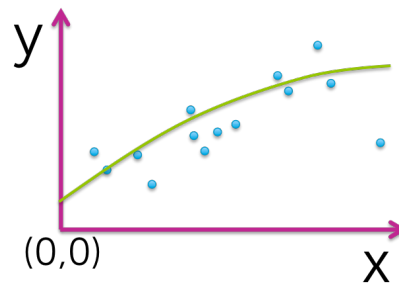
shown by the green curve in the picture below. Out of the 3 parameters of the fitted function (w_0 , w_1 , w_2), which ones are estimated to be 0? (Note: you must select all parameters estimated as 0 to get the question correct.)



6. Assume we fit the

1 / 1
points

following
quadratic function:
 $f(x) = w_0 + w_1x + w_2x^2$
to the
dataset shown
(blue circles). The
fitted function is
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green curve in the
picture below. Out
of the 3
parameters of the
fitted function (w_0 ,
 w_1 , w_2), which
ones are
estimated to be 0?
*(Note: you must
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get the question
correct.)*

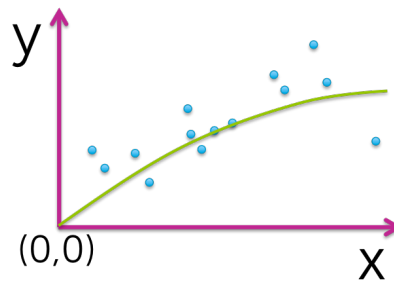


7.

1 / 1
points

Assume we fit the following quadratic function:
 $f(x) = w_0 + w_1 \cdot x + w_2 \cdot (x^2)$ to the dataset shown (blue circles). The fitted function is shown by the green curve in the picture below. Out of the 3 parameters of the fitted function (w_0 , w_1 , w_2), which ones are

estimated to be 0?
(Note: you must select all parameters estimated as 0 to get the question correct.)



8. Which of the following plots would you *not* expect to see as a plot of training and test error curves?
-

1 / 1
points

1 / 1
points

9. ***True or false:*** One always prefers to use a model with more features since it better captures the true underlying process.
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