

Linear Regression: Test Your Knowledge

Let's do a quick test! You must answer at least 4 questions correctly to pass this quiz.



1. Which of these is an example of a parameter that is calculated during training for a linear regression model?

- ☒ Weight

Correct!
- ☐ Learning rate
- ☐ Prediction
- ☐ Label

2. Fill-in-the-blanks

Enter one or more words to complete the sentence.

Suppose you are building a linear regression model to predict the sale price of a used car. The training dataset includes the following information: sale price (label), model year (feature), MSRP (feature), odometer mileage (feature), gas mileage (feature). How many weights will there be for this model?

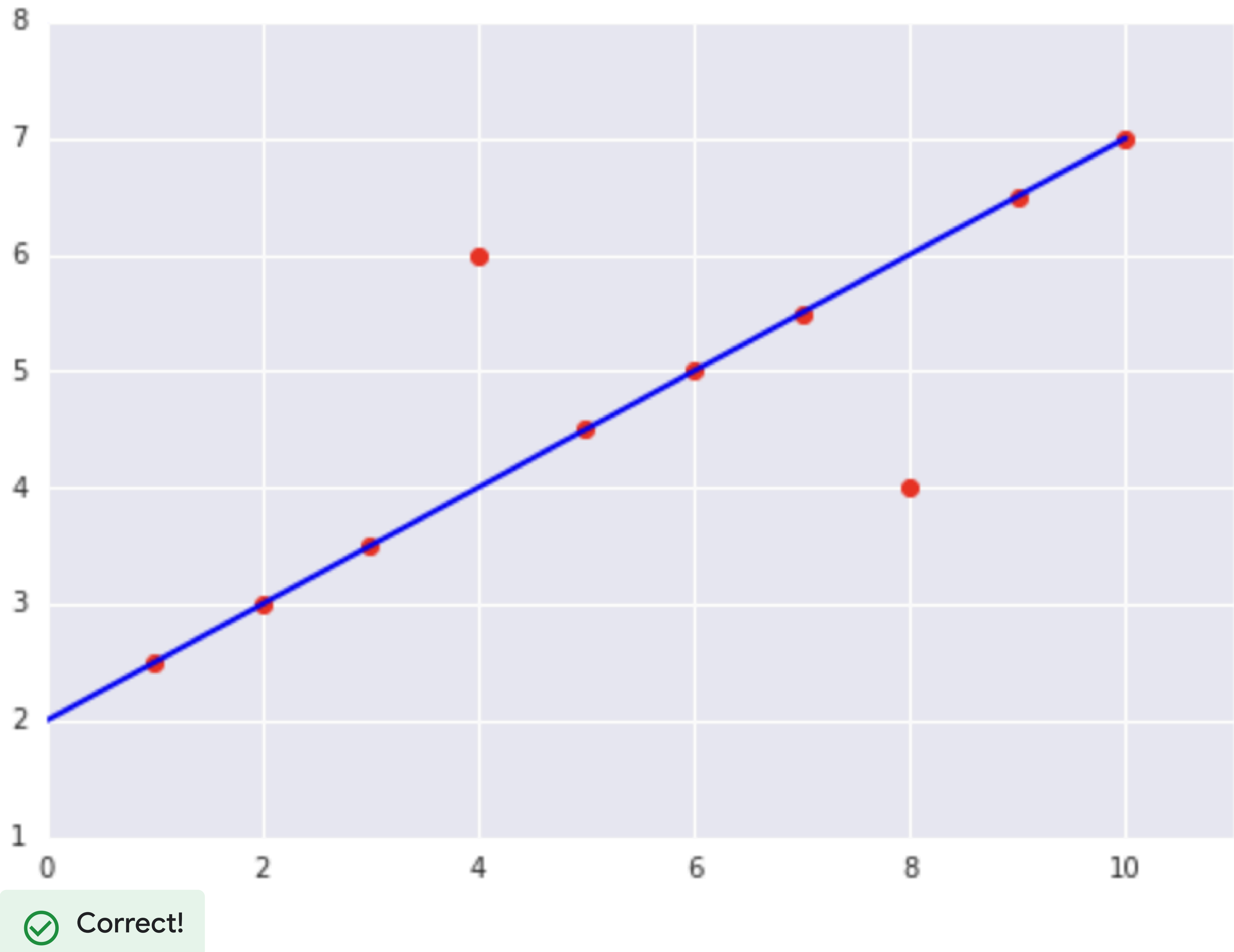
4

Correct!

3. Fill-in-the-blanks

Enter one or more words to complete the sentence.

Review the graph below. What is the mean squared error?



4. Which of these controls the size of the steps of the gradient descent algorithm?

- ☒ Learning rate

Correct
- ☐ Loss function
- ☐ Batch size
- ☐ Regularization rate

5. Suppose you are training a linear regression model and after about 100 iterations you notice that the loss is high and trending downward, but not by a significant amount. What is likely to be the problem?

- ☐ The learning rate is too large.
- ☒ The learning rate is too small.

If the learning rate is too low, loss values will decrease very slowly during gradient descent.
- ☐ Your dataset has too many examples.
- ☐ Your dataset does not have enough examples.

Results

You scored 5 out of 5. Congratulations! You have passed this quiz.

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