## Congratulations! You passed!

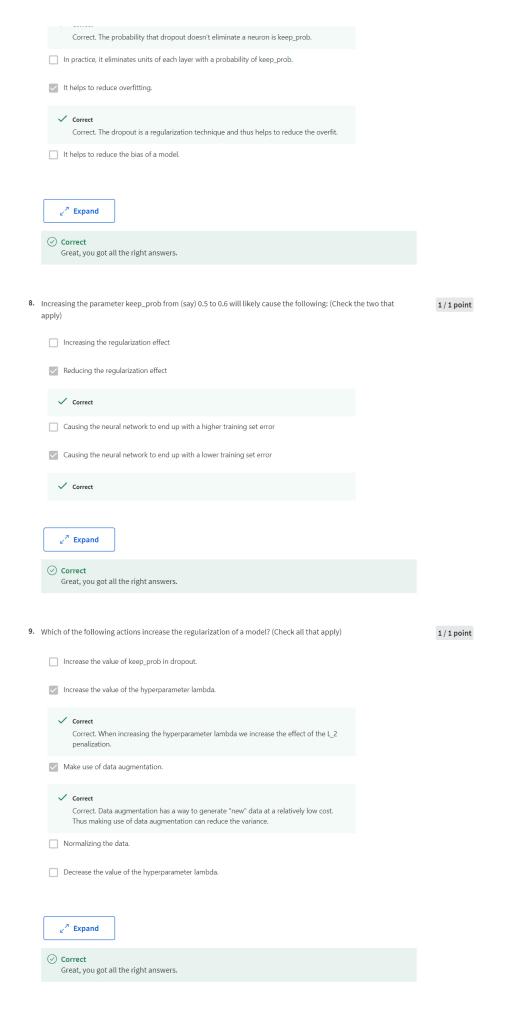
Grade received 80% Latest Submission Grade 80% To pass 80% or higher

Go to next item

.....

1.	If you have 10,000 examples, how would you split the train/dev/test set? Choose the best option.	0/1 point
	60% train. 20% dev. 20% test.	
	33% train. 33% dev. 33% test.	
	98% train. 1% dev. 1% test.	
	∠ <sup>7</sup> Expand	
	No. This might be considered a small data set, not in the range of big data. Thus a more classical (old) best practice should be used.	
2.	When designing a neural network to detect if a house cat is present in the picture, 500,000 pictures of cats were taken by their owners. <b>These are used to make the training, dev and test sets</b> . It is decided that to increase the size of the test set, 10,000 new images of cats taken from security cameras are going to be used in the test set. Which of the following is true?	1/1 point
	This will increase the bias of the model so the new images shouldn't be used.	
	This will reduce the bias of the model and help improve it.	
	This will be harmful to the project since now dev and test sets have different distributions.	
	∠ <sup>7</sup> Expand	
	○ Correct     Yes. The quality and type of images are quite different thus we can't consider that the dev and the test sets came from the same distribution.	
3.	If your Neural Network model seems to have high bias, what of the following would be promising things to try? (Check all that apply.)	1/1 point
	✓ Make the Neural Network deeper	
	✓ Correct	
	Get more training data	
	✓ Increase the number of units in each hidden layer	
	✓ Correct	
	Add regularization	
	<sub>∠</sub> <sup>7</sup> Expand	
	○ Correct     Great, you got all the right answers.	

•• WOINING OF A HOUSE TO CLASSIFY DATIATION AND A CLASSIFIC YEAR A CLARITING SECTION OF 0.170 and a devertion of 11%. Which of the following two are true?	U/1 point
The model has a very high bias.	
☐ The model is overfitting the train set.	
✓ The model has a high variance.	
✓ Correct	
No. This model has a low bias and high variance.   The model is overfitting the dev set.	
This should not be selected	
No. This would imply a very low error on the dev set.	
∠ <sup>7</sup> Expand	
Incorrect You didn't select all the correct answers	
5. Which of the following are regularization techniques?	1/1 point
Gradient Checking.	
✓ Weight decay.	
✓ Correct  Correct. Weight decay is a form of regularization.	
✓ Dropout.	
✓ Correct	
Correct. Using dropout layers is a regularization technique.  Increase the number of layers of the network.	
∠ <sup>≯</sup> Expand	
<b>⊘</b> Correct	
Great, you got all the right answers.	
What happens when you increase the regularization hyperparameter lambda?	1/1 point
Doubling lambda should roughly result in doubling the weights	2/26000
Weights are pushed toward becoming smaller (closer to 0)	
Weights are pushed toward becoming bigger (further from 0)	
Gradient descent taking bigger steps with each iteration (proportional to lambda)	
<sub>∠</sub> <sup>≯</sup> Expand	
<b>⊘</b> Correct	
7. Which of the following are true about dropout?	1/1 point
✓ In practice, it eliminates units of each layer with a probability of 1- keep_prob.	
✓ Correct	



Normalization is another word for regularization—It helps to reduce variance
It makes it easier to visualize the data
It makes the parameter initialization faster
It makes the cost function faster to optimize
∠ <sup>7</sup> Expand
<b>⊘</b> Correct