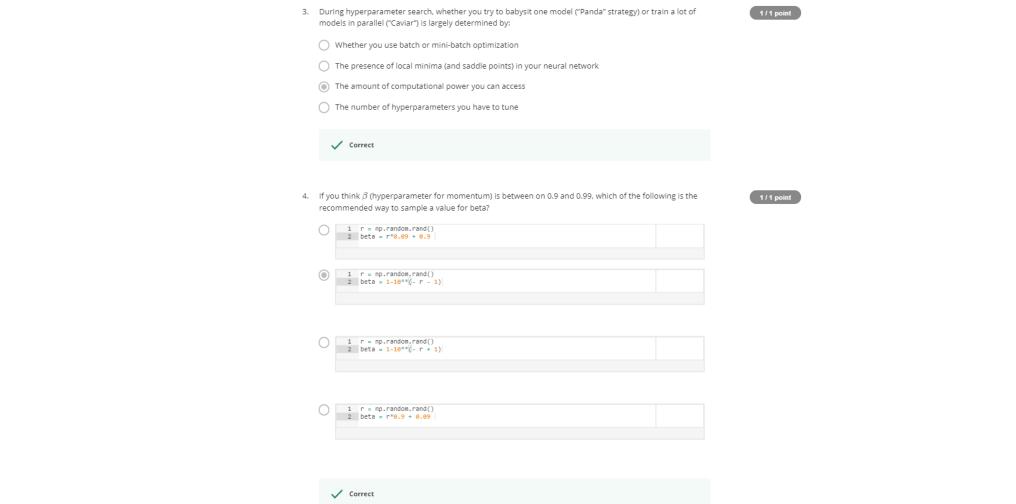
Hyperparameter tuning, Batch Normalization, Programming Frameworks

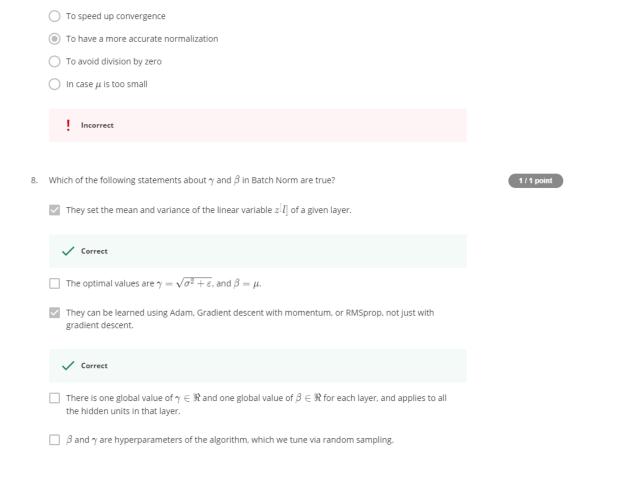
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critical than others.

If searching among a large number of hyperparameters, you should try values in a grid rather than random values, so that you can carry out the search more systematically and not rely on chance. True or False?	1/1 point
○ True	
False	
✓ Correct	
Every hyperparameter, if set poorly, can have a huge negative impact on training, and so all hyperparameters are about equally important to tune well. True or False?	1/1 point
○ True	
False	
✓ Correct	
Yes. We've seen in lecture that some hyperparameters, such as the learning rate, are more	



5.	Finding good hyperparameter values is very time-consuming. So typically you should do it once at the start of the project, and try to find very good hyperparameters so that you don't ever have to revisit tuning them again. True or false?	1/1 point
	○ True	
	False	
	✓ Correct	
6.	In batch normalization as presented in the videos, if you apply it on the l th layer of your neural network, what are you normalizing?	1/1 point
	$\bigcirc W^{[l]}$	
	$lefton z^{[l]}$	
	\bigcirc $a^{[l]}$	
	$\bigcirc \ b^{[l]}$	
	✓ Correct	
7.	In the normalization formula $z_{norm}^{(i)}=\frac{z^{(i)}-\mu}{\sqrt{g^2+e}}$, why do we use epsilon?	0 / 1 point



9.	After training a neural network with Batch Norm, at test time, to evaluate the neural network on a new example you should:	1/1 point
	$\ igoplus$ Perform the needed normalizations, use μ and σ^2 estimated using an exponentially weighted average across mini-batches seen during training.	
	If you implemented Batch Norm on mini-batches of (say) 256 examples, then to evaluate on one test example, duplicate that example 256 times so that you're working with a mini-batch the same size as during training.	
	Ouse the most recent mini-batch's value of μ and σ^2 to perform the needed normalizations.	
	\bigcirc Skip the step where you normalize using μ and σ^2 since a single test example cannot be normalized.	
	✓ Correct	
10.	Which of these statements about deep learning programming frameworks are true? (Check all that apply)	1 / 1 point
	A programming framework allows you to code up deep learning algorithms with typically fewer lines of code than a lower-level language such as Python.	
	✓ Correct	
	Deep learning programming frameworks require cloud-based machines to run.	
	Even if a project is currently open source, good governance of the project helps ensure that the it remains open even in the long term, rather than become closed or modified to benefit only one company.	
	✓ Correct	