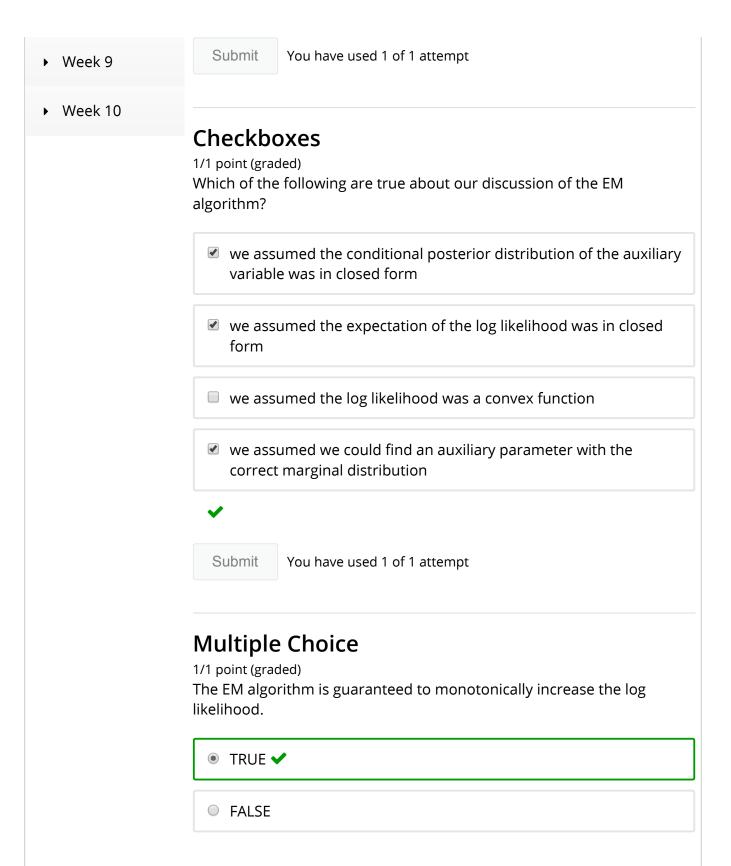


F	Week 8 > Week 8 Quiz > Week 8 Quiz
Bookmarks	Week 8 Quiz
Machine Learning Course: Getting Started	Checkboxes 1/1 point (graded) Check all probabilistic models.
▶ Week 1	✓ logistic regression
▶ Week 2	support vector machines
▶ Week 3	■ K-means
▶ Week 4	Bayes classifiers
▶ Week 5	Decision trees
▶ Week 6	✓
▶ Week 7	Submit You have used 1 of 1 attempt
▼ Week 8	
Lecture 15 The EM Algorithm for Maximum Likelihood, Missing Data	Checkboxes 1/1 point (graded) Check all that are true about the KL divergence between distributions $m{q}$ and $m{p}$.
Lecture 16 Mixture Models, Gaussian	$lacksquare KL(q\ p) = KL(p\ q)$
Mixtures	extstyle ext
Week 8 Quiz Quiz due Apr 11, 2017 07:30 MYT	$lacksquare KL(q\ p)=0\Rightarrow q=p$
Week 8 Discussion Questions	$lacksquare KL(q\ p) \leq 0$
Questions	



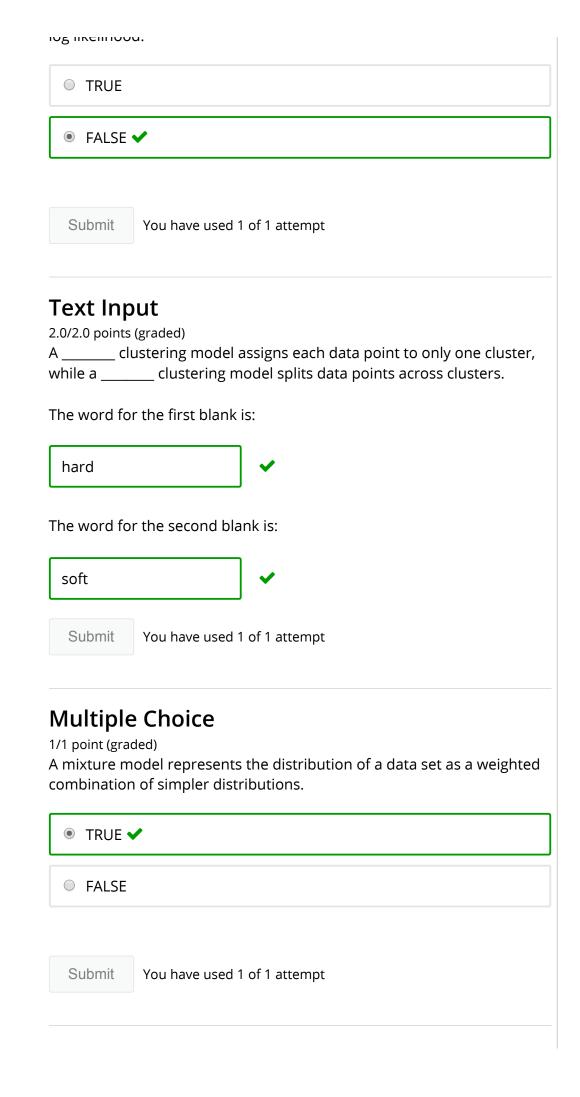
Submit You

You have used 1 of 1 attempt

Multiple Choice

1/1 point (graded)

The EM algorithm is guaranteed to find the global optimal solution of the log likelihood



Checkboxes

1/1 point (graded)

Check all true statements about (1) K-component mixture models and (2) K-class Bayes classifiers.

- (1) is a supervised model, while (2) is an unsupervised model
- ✓ (1) is an unsupervised model, while (2) is a supervised model
- ✓ the cluster assignments in (1) correspond to the class assignments in (2)
- both have closed form solutions without the need for an iterative algorithm



Submit

You have used 1 of 1 attempt

Checkboxes

1/1 point (graded)

The maximum likelihood EM algorithm for the Gaussian mixture model will automatically learn an "appropriate" number of clusters for the data set by not assigning any data to the unnecessary clusters.



✓ FALSE



Submit

You have used 1 of 1 attempt

© All Rights Reserved



© 2012-2017 edX Inc. All rights reserved except where noted. EdX, Open edX and the edX and Open EdX logos are registered trademarks or trademarks of edX Inc.

















