

## QUICK QUESTION 4 (1/1 point)

For which of the following models should external validation be used? Consider both the population used to train the model, and the population that the model will be used on.

- ☒ A model to predict obesity risk. Data from a random sample of California residents was used to build the model, and we want to use the model to predict the obesity risk of all United States residents. ✓
- ☐ A model to predict the stress of MIT students. Data from a random sample of MIT students was used to build the model, and we want to use the model to predict the stress level of all MIT students.
- ☒ A model to predict the probability of a runner winning a marathon. Data from all runners in the Boston Marathon was used to build the model, and we want use the model to predict the probability of winning for all people who run marathons. ✓

### EXPLANATION

In the first and third models, we are using a special sub-population to build the model. While we can use the model for that sub-population, we should use external validation to test the model on other populations. The second model uses data from a special sub-population, but the model is only intended for that sub-population, so external validation is not necessary.

Final Check

Save

Hide Answer

You have used 1 of 2 submissions



About (https://www.edx.org/about-us) Jobs (https://www.edx.org/jobs)  
Press (https://www.edx.org/press) FAQ (https://www.edx.org/student-faq)  
Contact (https://www.edx.org/contact)



EdX is a non-profit created by founding partners Harvard and MIT whose mission is to bring the best of higher education to students of all ages anywhere in the world, wherever there is Internet access. EdX's free online MOOCs are interactive and subjects include computer science, public health, and artificial intelligence.



(http://www.meetup.com/edX-Global-Community/)



(http://www.facebook.com/EdxOnline)



(https://twitter.com/edXOnline)



(https://plus.google.com/108235383044095082)



(http://youtube.com/user/edxonline)

© 2014 edX, some rights reserved.

Terms of Service and Honor Code -  
Privacy Policy (https://www.edx.org/edx-privacy-policy)