Feedback — Quiz: Week Seven

Help Center

You submitted this quiz on **Sat 27 Jun 2015 1:04 AM PDT**. You got a score of **6.00** out of **6.00**.

Question 1

Consider whether the following statement is true or false:

Given an assumption that the number of covariate patterns in the dataset is *n*, once the final model is fit, the number of covariate patterns can never be less than *n*.

(please answer True or False below)

Your Answer		Score	Explanation
○ True			
◉ False	✔	1.00	Great job! For example, if there are 4 independent variables in the data set and the final model contains only two and each coded at 2 levels, then there are only 4 possible covariate patterns.
Total		1.00 / 1.00	

Question 2

Complete the following statement

The number of covariate patterns is important in...

Your Answer	Score	Explanation
○ Model development		

◉ Assessing the fit of a model	✔	1.00	Nice work! The degrees of freedom for tests are based on the difference in the number of variables in competing models, not on the number of covariate patterns.
○ None of the above			
Total		1.00 / 1.00	

Question 3

Complete the following definition

The ROC curve is obtained by plotting...

Your Answer		Score	Explanation
◉ Sensitivity vs. (1- Specificity)	✔	1.00	Good job, you got it right!
○ (1- Sensitivity) vs. (1- Specificity)			
○ Specificity vs. (1- Sensitivity)			
○ Sensitivity vs. Specificity			
Total		1.00 / 1.00	

Question 4

Consider whether the following statement is true or false:

Specificity is always (1 – Sensitivity)

(please answer True or False below)

Your Answer	Score	Explanation
○ True		

◉ False	✔	1.00	Nice work! We know that sensitivity is the true positive rate and the specificity is the true negative rate.
Total		1.00 / 1.00	

Question 5

Which of the following tests can you use for assessing the goodness of fit of a logistic model?

Select all that apply

Your Answer		Score	Explanation
☐ The Breslow-Day test	✔	0.20	This is **not** a test you could use for assessing goodness of fit. The Breslow-Day test is used in stratified analysis for homogeneity of odds ratio
☐ The Mantel Haenszel test	✔	0.20	This is **not** a test you could use for assessing goodness of fit. The Mantel Haenszel test is used in stratified analysis for homogeneity of odds ratio
☐ The Likelihood Ratio test	✔	0.20	This is **not** a test you could use for assessing goodness of fit. The Likelihood Ratio test is used to check if the fitted model is better than the naïve model
☑ The Pearson Chi-Squared test	✔	0.20	This test **can** be used to assess goodness of fit.
☑ The Hosmer-Lemeshow test	✔	0.20	This test **can** be used to assess goodness of fit.
Total		1.00 / 1.00	

Question 6

Suppose the area under the ROC curve is 0.785. What would that indicate?

Your Answer		Score	Explanation
○ Outstanding discrimination			
○ Excellent discrimination			
◉ Acceptable discrimination	✔	1.00	Great job! We know this from **Slide 32 of the Week Seven notes** which shows the scale of discrimination from the area under the ROC curve.
○ No discrimination			
Total		1.00 / 1.00	