Feedback — Quiz: Week One

You submitted this quiz on **Mon 23 Mar 2015 8:53 PM PDT**. You got a score of **6.00** out of **6.00**.

Question 1

What is the sum of the deviations about the mean?

Your Answer		Score	Explanation
○ 1			
○ -1			
⊙ 0	✔	1.00	Great job. It is always true that the sum of the deviations below the mean will always equal the sum of the deviations above the mean, summing to 0.
○ -5			
○ 5			
Total		1.00 / 1.00	

Question 2

Which expression below will give you an unbiased estimate of the population variance?

Your Answer		Score	Explanation
○ $\dfrac{\sum_{i=1}^{n} x_i^2}{n}$			
⊙ $\dfrac{\sum_{i=1}^{n} (x_i - \bar{x})^2}{n-1}$	✔	1.00	Great job.
○ $\dfrac{\sum_{i=1}^{n} (x_i - \bar{x})^2}{n}$			

○ $\dfrac{\sum_{i=1}^{n}(x_i - \bar{x})^2}{n-2}$

Total	1.00 / 1.00

Question 3

What theorem tells us that shape is the sampling distribution of the sample mean will be normal?

Your Answer	Score	Explanation
○ Bayes Theorem		
◉ Central Limit Theorem	✔ 1.00	Great job. The Central Limit Theorem states that the distribution of a large number of independent and identically distributed variables will be approximately normal.
○ Burke's Theorem		
○ None of the above		
Total	1.00 / 1.00	

Question 4

Is the following interpretation of a confidence interval True or False?

Upon repeated sampling, 95% of intervals constructed in the same way will contain the true population parameter.

Your Answer	Score	Explanation
◉ True	✔ 1.00	
○ False		

Total   1.00 / 1.00

Question 5

Big p-values (p>.05) conclude which one of the following?

Your Answer	Score	Explanation
○ Accept the null hypothesis		
⦿ Fail to reject the null hypothesis	✔ 1.00	Good job! It is incorrect to 'accept' the null hypothesis. Statisticians will always use 'fail to reject the null hypothesis'.
○ Reject the null hypothesis		
○ None of the above		
Total	1.00 / 1.00	

Question 6

What does a positive slope indicate?

Your Answer	Score	Explanation
⦿ As X increases, Y increases	✔ 1.00	Great job! A positive slope always indicates that Y is increasing with X. If Y were to decrease with increases in X, this would indicate a negative slope.
○ No association between X and Y		
○ As X increases, Y decreases		

○ None of the
above

Total	1.00 / 1.00