Week 3 Lab

Quiz, 7 questions

X Try again once you are ready.

Required to pass: 80% or higher
You can retake this quiz up to 3 times every 8 hours.

Back to Week 3

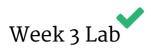
Retake

1 / 1 points			
1.			
There are 1,000 cases in this data set, what do the cases repre-	sent?		
The hospitals where the births took place			
The days of the births			
The fathers of the children			
The births			
Correct			

Week 3 Lab	
•	

Quiz, 7 questions 2.

2. How many mothers are we missing weight gain data from?					
	0				
	13				
	27				
Correct					
	31				
×	0 / 1 points				
	ide-by-side boxplots of habit and weight. Which of the ng is false about the relationship between habit and weight?				
	Both distributions are extremely right skewed.				
	Range of birth weights of babies born to non-smoker mothers is greater than that of babies born to smoker mothers.				
	Median birth weight of babies born to non-smoker mothers is slightly higher than that of babies born to smoker mothers.				
This should not be selected					
\bigcirc	The IQRs of the distributions are roughly equal.				



Quiz, 7 questions 4.

What are the hypotheses for testing if the average weights of babies born to smoking and non-smoking mothers are different?

 $H_0: \mu_{smoking} = \mu_{non-smoking}$

 $H_A: \mu_{smoking} > \mu_{non-smoking}$

 $H_0: \mu_{smoking} = \mu_{non-smoking}$

 $H_A: \mu_{smoking}
eq \mu_{non-smoking}$

Correct

 $H_0: ar{x}_{smoking} = ar{x}_{non-smoking}$

 $H_A: \bar{x}_{smoking} \neq \bar{x}_{non-smoking}$

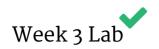
 $igg(H_0: ar{x}_{smoking} = ar{x}_{non-smoking} igg)$

 $H_A: \bar{x}_{smoking} > \bar{x}_{non-smoking}$

 $H_0: \mu_{smoking}
eq \mu_{non-smoking}$

 $H_A: \mu_{smoking} = \mu_{non-smoking}$

3 of 6



Quiz, 7 questions 5.

Change the type argument to "ci" to construct and record a confidence interval for the difference between the weights of babies born to smoking and non- smoking mothers. Which of the following is the best interpretation of the interval?

	We are 95% confident that babies born to nonsmoker mothers are on average 0.05 to 0.58 pounds lighter at birth than babies born to smoker mothers.		
	We are 95% confident that the difference in average weights of babies whose moms are smokers and nonsmokers is between 0.05 to 0.58 pounds.		
	We are 95% confident that the difference in average weights of babies in this sample whose moms are smokers and nonsmokers is between 0.05 to 0.58 pounds.		
	We are 95% confident that babies born to nonsmoker mothers are on average 0.05 to 0.58 pounds heavier at birth than babies born to smoker mothers.		
Correct			



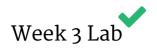
Quiz, 7 questions 6.

Calculate a 99% confidence interval for the average length of pregnancies (`weeks`). Note that since you're doing inference on a single population parameter, there is no explanatory variable, so you can omit the `x` variable from the function. Which of the following is correct interval?

	(38.0952 , 38.5742)
\bigcirc	(38.0892 , 38.5661)
\bigcirc	(6.9779 , 7.2241)

This should not be selected

(38.1526, 38.5168)



Quiz, 7 questions 7.

Now, a non-inference task: Determine the age cutoff for younger and mature mothers. Use a method of your choice. What is the maximum age of a younger mom and the minimum age of a mature mom, according to the data?

	The maximum age of younger moms is 32 and minimum age of mature moms is 33.		
	The maximum age of younger moms is 34 and minimum age of mature moms is 35.		
Correct			
	The maximum age of younger moms is 35 and minimum		

The maximum age of younger moms is 33 and minimum age of mature moms is 34.

age of mature moms is 36.





