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1.	Which of the following statements accurately describe the null hypothesis? Select all that apply.	1/1 point
	The alternative hypothesis typically assumes that observed data does not occur by chance.  Correct	
	<ul> <li>□ The alternative hypothesis typically assumes that observed data occurs by chance.</li> <li>☑ The null hypothesis typically assumes that observed data occurs by chance.</li> </ul>	
	☐ The null hypothesis typically assumes that observed data does not occur by chance.	
2.	What term describes the probability of rejecting the null hypothesis when it is true?	1/1 point
	O P-value	
	○ Confidence interval	
	Significance level	
	Alternative hypothesis	
	<b>⊘</b> Correct	
3.	When would a data professional reject the null hypothesis?	1/1 point
	When their p-value is less than their significance level	
	When their p-value is less than their test statistic	
	When their test statistic is less than their p-value	
	When their significance level is less than their p-value	
	<b>⊘</b> Correct	
4.	A data professional conducts a hypothesis test. When they draw their conclusion, they commit a type I error. Which of the following statements describe their error? Select all that apply.	1/1 point
	✓ They reject a null hypothesis that is actually true.	
	<b>⊘</b> Correct	
	They conclude their result is statistically significant when in fact it occurred by chance.	
	<b>⊘</b> Correct	
	They fail to reject a null hypothesis that is actually false.	
	They conclude their result occurred by chance when in fact it is statistically significant.	
5.	A data analytics team in the landscaping industry conducts a hypothesis test to compare the effects of certain fertilizers on flower production. To start, they state the null hypothesis and the alternative hypothesis. Then they choose a significance level. What should they do next?	1/1 point
	O Identify the confirmed assumption	
	Find the p-value	
	O Select the sample data	
	Reject or fail to reject the null hypothesis	
	⟨ Correct	

6.	A data professional conducts a hypothesis test. They choose a significance level of 5%. They calculate a p-value of 3.3%. What conclusion should they draw?	1/1 point
	Reject the alternative hypothesis.	
	O Fail to reject the alternative hypothesis.	
	O Fail to reject the null hypothesis.	
	Reject the null hypothesis.	
	<b>⊘</b> Correct	
7.	A data professional is conducting a hypothesis test. Their null hypothesis states that there is no difference between two population proportions. What type of test are they conducting?	1 / 1 point
	Two-sample z-test	
	O Two-sample t-test	
	One-sample z-test	
	One-sample t-test	
	<b>⊘</b> Correct	
8.	A data professional conducts a hypothesis test to compare the mean annual sales of two different restaurants in the same restaurant chain. They write the following code:	1 / 1 point
	<pre>scipy.stats.ttest_ind(a=530, b=550, equal_var=FALSE)</pre>	
	What does the argument <b>b=550</b> refer to?	
	O P-value	
	○ Significance level	
	O Whether or not the population variance of the two samples is assumed to be equal	
	Observations from the second sample	
	○ Correct	