This Test has 2 attempts. For information on editing questions, click **More Help** below.
This Test has at least one attempt in progress. Deleting questions has been disabled. The attempts currently in progress are by: Ryan Hawley, Anna Templeton

Test Canvas: M6 Group Work submission z-test

The Test Canvas lets you add, edit, and reorder questions, as well as review a test. More Help

Question Settings

You can edit, delete, or change the point values of test questions on this page. If necessary, test attempts will be regraded after you submit your changes.

Description	
Instructions	
Total Questions	11
Total Points	100
Number of Attempts	2

Select: All None Select by Type: - Question Type -

Points Update and Regrade Hide Question Details

Points: 0

1. Short Answer: Enter the names of the group members ...

Question	Enter the names of the group members who worked on this submission.
Answer	

Points: 5

2. Calculated Numeric: 4b. Report the p-value for the good...

Question	4b. Report the p-value for the goodness of fit test for the historical data only
Answer	0.2805
Answer range +/-	0.1

Points: 5

3. Either/Or: 4.c. Is your historical annual anom ...

Question	4.c. Is your historical annual anom normally distributed?
Answer	✓ Yes No

Points: 5

4. Calculated Numeric: 5.a. Report the mean of the baseline...

Question	5.a. Report the mean of the baseline population era annual anom J-D
Answer	53.8
Answer range +/-	0.2

Points: 5

5. Calculated Numeric: 5.b. Report the standard deviation o...

Question	5.b. Report the standard deviation of the baseline population era annual anom J-D
Answer	22.63
Answer range +/-	0.2

Points: 5

6. Calculated Numeric: 5.c. report the obtained (calculated...

Question	5.c. report the obtained (calculated) z-test statistic
Answer	-32.119
Answer range +/-	1

Points: 5

7. Short Answer: 6.a. report the correct p-value asso...

Question	6.a. report the correct p-value associated with this test.
Answer	p < 0.0001

Points: 5

8. Either/Or: 6.b. Is there a significant differen...

Question	6.b. Is there a significant difference between the historical sample annual anom and the baseline population?
Answer	Yes No

Points: 10

9. Short Answer: 6.c. Describe any differences you f...

Question	6.c. Describe any differences you find based on the statistical output in JM
Answer	Historical era global annual temperatures were significantly cooler than the baseline population.

Points: 20

10. Essay: 7. Write a concise on paragraph sum...

Question	7. Write a concise on paragraph summary of this analysis. Note that you've already reported the key information above so this is testing your ability to summarize it all nicely, clearly and in concise, statistical format.
Answer	We hypothesized that there is no difference in mean annual global temperature anomalies for the "historic era" (1880 – 1980) and a baseline population (1981-2010) annual temperature anomalies. A two-tailed, one sample z-test found that there is a significant difference between the Anthropocene and baseline eras ($z(101)=-32.119$, $p<0.0001$). Historical era global annual temperatures were significantly cooler than the baseline population. This matches global change models predictions of increased temperatures and indicates that we may have entered a different climate era.

☐ **11. Essay: 8. Write a concise on paragraph summ...** Points: 35

Question	8. Write a concise on paragraph summary of the Anthropocene sample mean comparison to the baseline population.
Answer	Note that 5 points are removed for each component of the following example response that is missing or incorrect. This includes context and relevant data information, hypothesis, type of test, significance of results, z-test statistic value, p-value, proper format for statistical shorthand, and interpretation of some sort. **Example Answer:** *We hypothesized that the mean annual global temperature anomalies from the "Anthropocene era" (2011-2017) were significantly higher than a baseline era (1981-2010). A one-tailed, One Sample Z-test confirmed our hypothesis and revealed that temperatures were significantly higher in the Anthropocene era [$z(7)=4.81$, $p<0.0001$]. This result supports the growing consensus among scientists that the global climate is changing rapidly due to human activities.*

Select: All None Select by Type: - Question Type -

Points Update and Regrade Hide Question Details

← OK