

11. Interpret the 95% CI.
12. Write these results for the text of an article by using proper APA style.

Answers

1. There will be no difference in employee productivity before lunch or after lunch.
2. Mean difference = $\frac{7}{6} = 1.167$
3. 0.75
4. $t = \frac{1.167}{0.75}$
 $t = 1.56$
5. 5
6. ± 2.571
7. Greater than 5% because the t statistic of 1.56 is less than the critical value of ± 2.571 .
8. Given the answer to question 7, we do not reject the null hypothesis.
9. Employees were equally as productive before lunch as they were after lunch.
10. $d = \frac{1.167}{1.834}$
 $d = 0.64$. This is a moderate effect size. That is, time of day is moderately predictive of an employee's productivity.
11. The 95% CI is -0.75 to 3.09 , meaning that 95% of the samples drawn from the same population would be between -0.75 and 3.09 . Because this interval contains 0, we cannot be confident there is a difference in productivity before lunch and after lunch.
12. Here is the proper write-up in APA style:

The paired samples t test revealed that people were as productive before lunch ($M = 5.17$, $SD = 0.75$) as they were after lunch ($M = 4.00$, $SD = 2.28$), $t(5) = 1.56$, $p > .05$, $d = 0.64$, 95% CI $[-0.75, 3.09]$.