

## Answers

1.  $1,500 - 850 = 650$  is the mean difference score
2.  $t = 4.73$
3. 137.42
4. sample size  $- 1$ , so here, we have  $15 - 1 = 14$  degrees of freedom
5.  $\pm 2.145$
6.  $p < .05$  (less than 5%)
7. Because the  $t$  statistic exceeded the critical value, we reject the null hypothesis.
8. We can generalize our result to the population; more specifically, we can conclude that people take longer to identify a creature when asked whether it's a salamander than when asked whether it's a snake.
9. This is a strong effect size. That is, the creature people were asked to identify had a strong effect on how long it took them to respond.
10. The 95% CI is 355.29 ms to 944.71 ms, meaning that repeated sampling of this population would lead us to find that 95% of those samples would have a mean difference between 355.29 ms and 944.71 ms. Because this interval does not contain 0, it means we can be confident that, in the population, people respond more quickly when asked whether a creature is a snake than when asked whether a creature is a salamander.