AP Statistics

Two Sample t-test.

Used to see if the population means for two different populations are the same. Be careful: NOT the same as a matched pairs test. ( A matched pairs test generally uses same population and takes two samples and then tests the difference.)

DID THE ATLANTA BRAVES SCORE THE SAME AMOUNT OF RUNS AT HOME (TURNER FIELD) AND ON THE ROAD IN 2016?

A random sample (with replacement) for Atlanta Braves in 2016 home and away from Turner Field. The following are runs scored.

Home: 1, 7, 4, 7, 13, 0, 3, 4, 2, 0, 0, 1

Away: 0, 9, 5, 5, 0, 4, 6, 6, 7, 5, 5, 3, 3, 2

Is there convincing evidence that the mean runs scored are not the same for home and away?

Answer the question;

a) doing a 2 sample t-test completely by hand using conservative degrees of freedom. (t-table on the back of this handout)

b) doing a 2 sample t-test using technology.

c) Using a confidence interval.

