

Tutorial Week 10

MATH1905: Statistics (Advanced)

Semester 2, 2017

Web Page: <http://sydney.edu.au/science/math/MATH1905>

Lecturer: Michael Stewart

Please complete any unfinished exercises from week 9.

1. In an effort to compare the durability of two different types of sandpaper, 10 pieces of type A sandpaper were subjected to treatment by a machine which measures abrasive wear. Eleven pieces of type B sandpaper were subjected to the same treatment. Assuming normality and equality of variance, test for equality of mean abrasive wear at the 5% level of significance using the following summary.

Type	Size	Mean	SD
A	10	27.4	2.3
B	11	24.1	3.1

2. In the setting of the previous question construct a 95% confidence interval for the (population) mean difference in abrasive wear. Should it be a “one-sided” or “two-sided” confidence interval?