

A large number of children are competing in a throwing competition. The distances, in metres, thrown by a random sample of 8 children are as follows.

19.8    22.1    24.4    21.5    20.8    26.3    23.7    25.0

- (a) Assuming that distances are normally distributed, test, at the 5% significance level, whether the population mean distance thrown is more than 22.0 metres. [7]
- (b) Find a 95% confidence interval for the population mean distance thrown. [3]