

Confidence intervals – AS Further Mathematics Statistics

1. **June/2022/Paper_7366/02S/No.4**

The height of lilac trees, in metres, can be modelled by a normal distribution with variance 0.7

A random sample of n lilac trees is taken and used to construct a 99% confidence interval for the population mean.

This confidence interval is (5.239, 5.429)

(a) Find the value of n

[3 marks]

(b) Joey claims that the mean height of lilac trees is 5.3 metres.

State, with a reason, whether the confidence interval supports Joey's claim.

[1 mark]
