

A scientist is investigating the lengths of the leaves of a certain type of plant. The scientist assumes that the lengths of the leaves of this type of plant are normally distributed. He measures the lengths, x cm, of the leaves of a random sample of 8 plants of this type. His results are as follows.

3.5 4.2 3.8 5.2 2.9 3.7 4.1 3.2

Find a 90% confidence interval for the population mean length of leaves of this type of plant. [4]