AQA – Confidence intervals – AS Further Mathematics Statistics

1. June/2020/Paper_2/No.4

Murni is investigating the annual salary of people from a particular town.

She takes a random sample of 200 people from the town and records their annual salary.

The mean annual salary is £28 500 and the standard deviation is £5100

Calculate a 97% confidence interval for the population mean of annual salaries for the people who live in the town, giving your values to the nearest pound.

[3 marks]

2. June/2019/Paper_2/No.3

Fiona is studying the heights of corn plants on a farm.

She measures the height, x cm, of a random sample of 200 corn plants on the farm.

The summarised results are as follows:

$$\sum x = 60255 \quad \text{and} \quad \sum (x - \overline{x})^2 = 995$$

Calculate a 96% confidence interval for the population mean of heights of corn plants on the farm, giving your values to one decimal place.

[5 marks]