

Exercise walk-through

6.1

Data

Pearson Edexcel · International GCSE · Mathematics A

Exercises 2.1·2.3

2.1 (Foundation) Find the range of 2,4,4,6,9.

2.2 (Foundation) Find the mean of 2,4,4,6,9.

2.3 (Foundation) Find the median of 2,4,4,6,9.

Exercises 2.1·2.3

2.1 (Foundation) Find the range of 2,4,4,6,9.

2.1 Range=maximum-minimum=9-2=7.

2.2 (Foundation) Find the mean of 2,4,4,6,9.

2.2 The total is 25 across five observations: mean= $25/5=5$.

2.3 (Foundation) Find the median of 2,4,4,6,9.

2.3 The sorted list is 2,4,4,6,9. Its third observation is 4.

Exercises 2.4·3.1

2.4 (Higher) Find the density for frequency 30 and class width 10.

3.1 Decide whether this claim is true. Justify with a concrete calculation or counterexample: The mean of a list must always be one of its observed values.

Exercises 2.4·3.1

2.4 (Higher) Find the density for frequency 30 and class width 10.

2.4 $\text{Density} = \text{frequency} / \text{class width} = 30 / 10 = 3$.

3.1 Decide whether this claim is true. Justify with a concrete calculation or counterexample: The mean of a list must always be one of its observed values.

3.1 False. The values 1 and 2 have mean 1.5, which is not observed. A mean balances the sum; it need not be a member of the list.

Local review guidance: show the chosen method; give the checked result; explain the condition or failed shortcut. This is authored classroom guidance.