

KS3 – Averages – Answers

Section A – Mean

Q1

- a) 6
- b) 8
- c) 16
- d) 7

Q2

- a) 16
- b) 11
- c) 4
- d) 3

Q3

- a) 15 points
- b) 11°C
- c) 150 pages

Q4

- a) $x = 7$
- b) $x = 16$
- c) 12

Q5

Total needed = $6 \times 14 = 84$.

Known total = 71.

Sixth number = 13.

Section B – Median

Q6

- a) 9
- b) 9
- c) 7.5
- d) 10.5

Q7

- a) 3.1
- b) 8
- c) 15

Q8

- a) 6 books
- b) 19.5 minutes
- c) 15

Q9

- a) $x = 11$
- b) $x = 9$
- c) $x = 12$

Section C – Mode

Q10

- a) 3
- b) 8
- c) 14
- d) 5

Q11

- a) No mode
- b) 2 and 5 (bimodal)
- c) 4

Q12

- a) 7
- b) dog
- c) 2

Section D – Range

Q13

- a) 11
- b) 14
- c) 5.3
- d) 11

Q14

- a) 11°C
- b) 17
- c) 17 cm

Q15

- a) $x = 15$
- b) $x = 4$
- c) $x = 4$

Section E – Choosing & Comparing Averages

Q16

- a) Mean = 7; median = 6; mode = 6; range = 7.
- b) Mean = 7; median = 7; mode = 7; range = 9.

Q17

- a) Mode — it identifies the most common shoe size.
- b) Median — it is less affected by an unusually low value.
- c) Mean — it uses all the values and there are no extreme values.
- d) Range — it measures spread, not an average.

Q18

Group A: mean = 6.4, range = 3.

Group B: mean = 6.4, range = 7.

Group A is more consistent because it has the smaller range.

Q19

Total needed = $5 \times 12 = 60$.

Known total = 45, so fifth number = 15.

Ordered set: 10, 10, 11, 14, 15.

Mean = 12, median = 11, mode = 10.