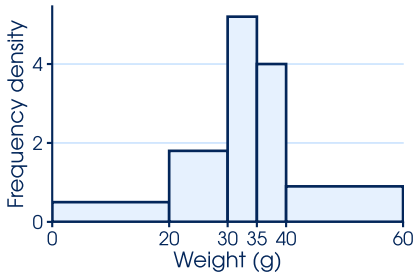
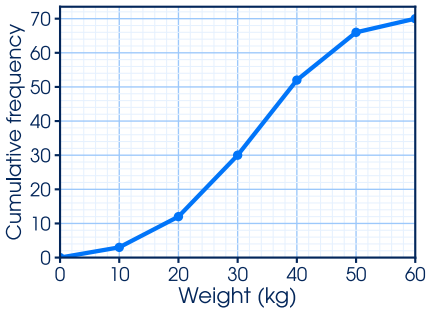
GCSE HIGHER · REVISION MAT 5

Cumulative frequency and histograms

1 Find the frequency of the class $30 < w \leq 35$.

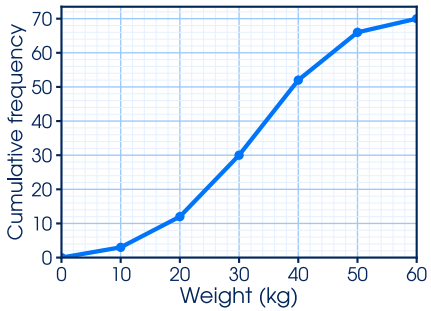


2 Estimate the median weight.



3 Explain why the interquartile range is often a better measure of spread than the range.

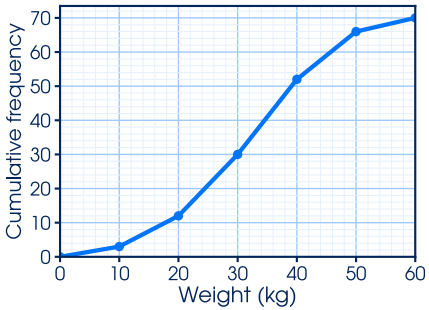
4 Estimate the interquartile range.



5 A class $40 < w \leq 60$ has frequency 18.

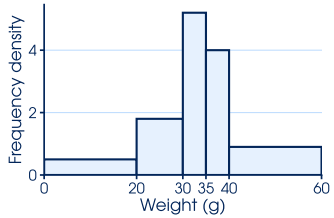
Show that its frequency density is 0.9.

6 Estimate how many weigh more than 45 kg.



7 Explain why the tallest bar of a histogram does not always have the greatest frequency.

8 Estimate the number of weights between 25 g and 45 g.



ANSWERS · REVISION MAT 5

Cumulative frequency and histograms

1 5×5.2

26

2 Read at 35

≈ 32 kg

3 **It ignores extreme values and shows the spread of the middle half.**

4 Q1 at 17.5 ≈ 23, Q3 at 52.5 ≈ 40

≈ 17 kg

5 **$18 \div 20 = 0.9$**

6 Read at 45: about 59

About 11

7 **A shorter, wider bar can have a larger area.**

8 25–30: 9; 30–35: 26

35–40: 20; 40–45: 4.5

≈ 60