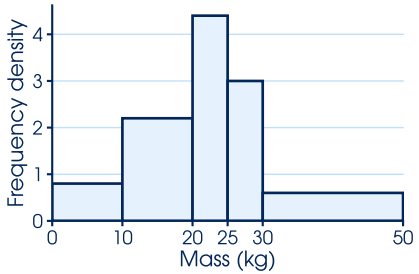
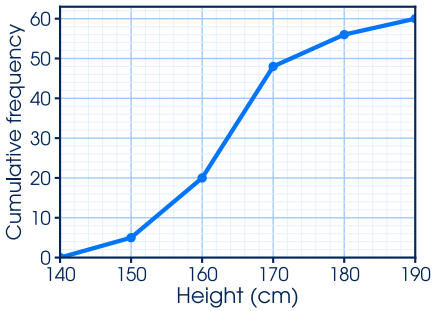
GCSE HIGHER · REVISION MAT 3

Cumulative frequency and histograms

1 Find the frequency of the class $20 < m \leq 25$.

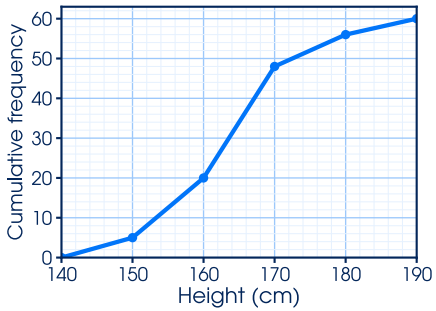


2 Estimate the median height.



3 Explain why a cumulative frequency graph never goes down.

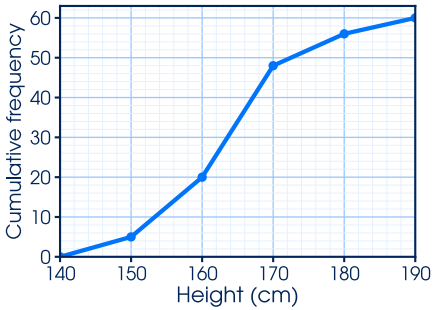
4 Estimate the interquartile range.



5 A class $25 < m \leq 30$ has frequency 15.

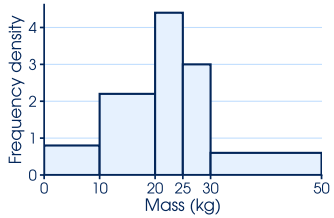
Show that its frequency density is 3.

6 Estimate how many are taller than 175 cm.



7 Explain the difference between a bar chart and a histogram.

8 Estimate the number of masses between 15 kg and 28 kg.



Mr&Mrs MATHS

ANSWERS · REVISION MAT 3

Cumulative frequency and histograms

1 5×4.4

22

2 Read at 30

≈ 164 cm

3 **Each value adds to the running total, which can only increase or stay the same.**

4 Q1 at 15 ≈ 157, Q3 at 45 ≈ 169

≈ 12 cm

5 **$15 \div 5 = 3$**

6 Read at 175: about 52

About 8

7 **In a histogram the area shows frequency and the bars touch on a continuous scale.**

8 15–20: 11

20–25: 22; 25–28: 9

≈ 42