

Paper Reference 1ST0/2H
Pearson Edexcel
Level 1/Level 2 GCSE (9–1)

Statistics
PAPER 2
Higher Tier
(Calculator)

Monday 17 June 2024 – Afternoon

Data Booklet

THIS DATA BOOKLET MUST BE RETURNED WITH THE
QUESTION PAPER AT THE END OF THE EXAMINATION.

In the boxes below, write your name, centre number and candidate number.

Surname					
Other names					
Centre Number					
Candidate Number					

INSTRUCTIONS

There may be spare copies of some data sheets in case you need them.

Contents

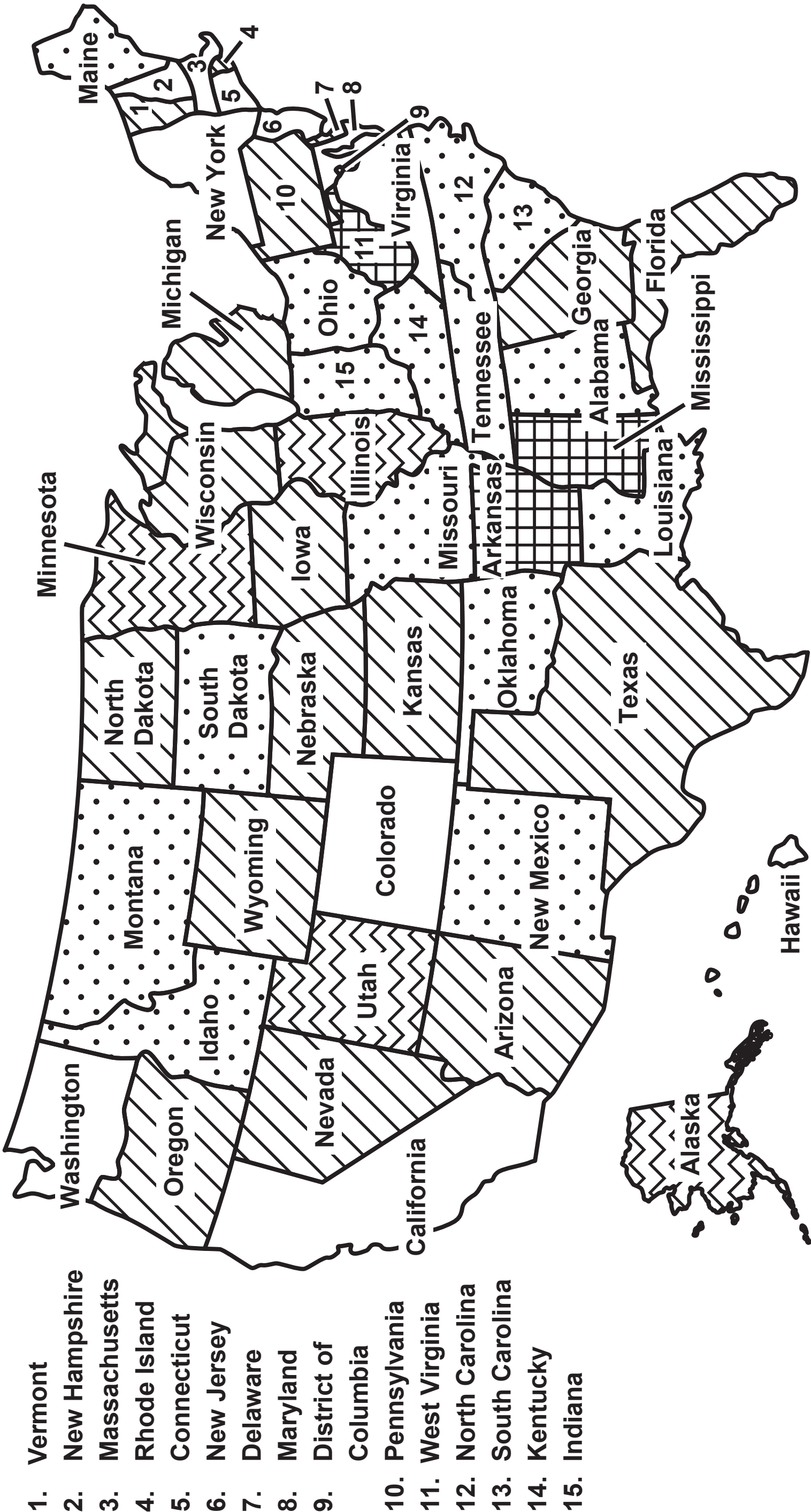
Page

3	Question 1(b) and 1(c)
4	Question 2(a), 2(b) and 2(c)
5	Question 2(d)
6	Question 3
7	Question 4(a)
8	Question 5(a), 5(b) and 5(c)
9	Question 6
10	Question 7(a) and 7(b)
11	Question 7(c)
12	Question 7(d)
13	Question 7(e)
14	Question 8
15	Question 9
16	Question 11(a), 11(b) and 11(c)

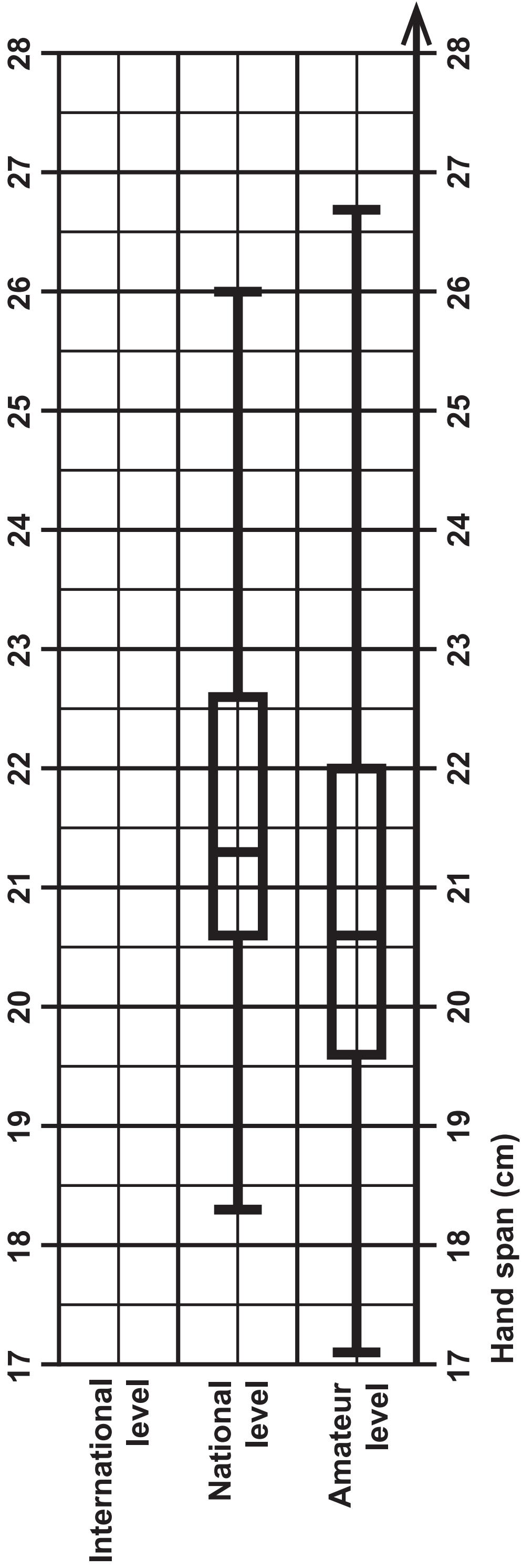
Spare copies

17	Question 2(a), 2(b) and 2(c)
18	Question 4(a)
19	Question 5(a), 5(b) and 5(c)
20	Question 6

Mean annual household income in \$ thousands.



Question 2(a), 2(b) and 2(c)



Question 2(d)

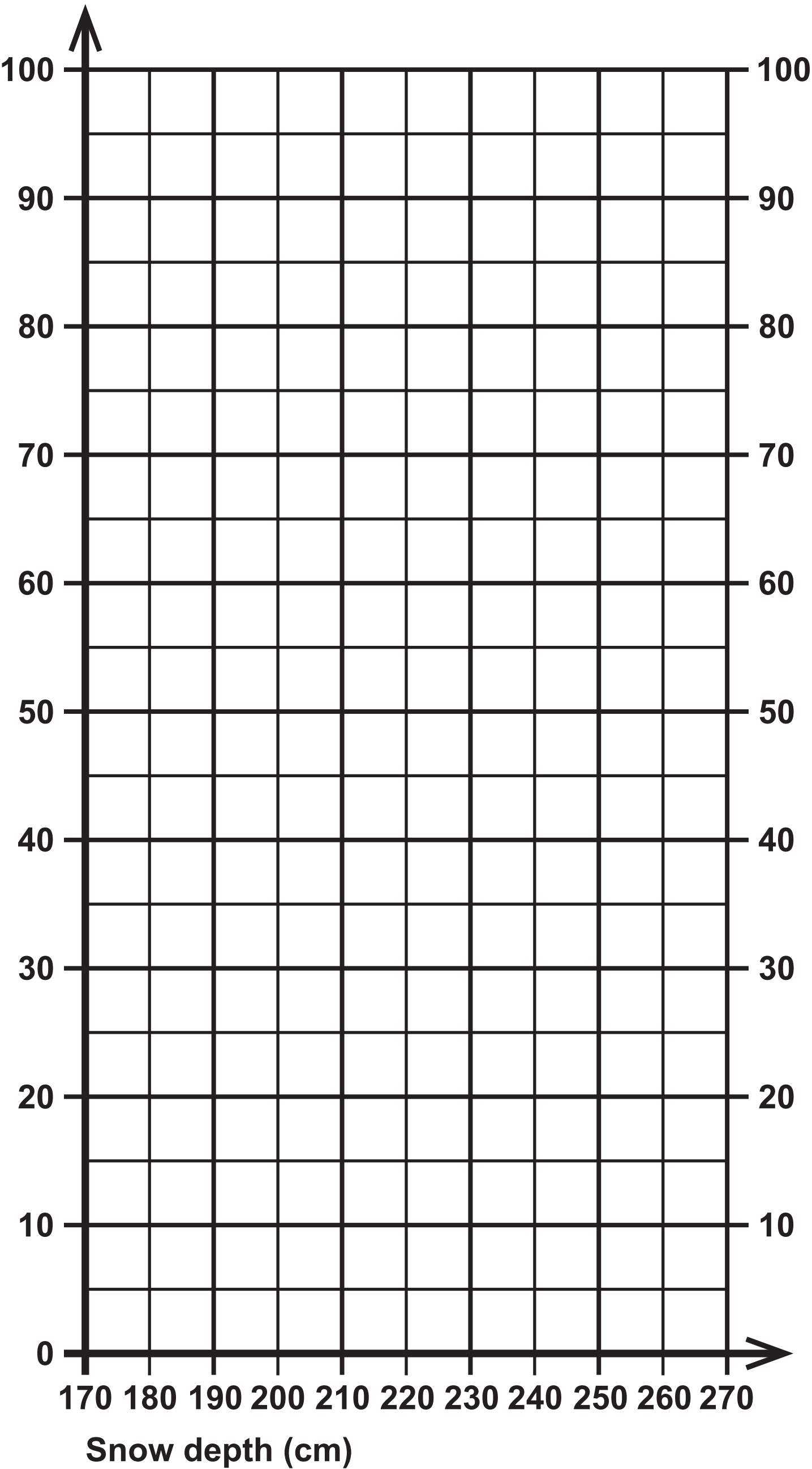
Hand span (cm)	Number of pianists
A (less than 19)	24
B ($19 \leq \text{span} < 22$)	65
C ($22 \leq \text{span} < 24$)	57
D (24 or more)	14

Question 3

	Passed	Failed	Total
Course A	35	15	50
Course B	48	32	80

Question 4(a)

Cumulative frequency



Question 5(a), 5(b) and 5(c)

KEY:

Welsh		England
8	7	
7 6 4 4 4	8	
8 6 5 5 2 1	9	
9 4 0	10	
	11	

Question 6

Area of land	Change in forest cover area (km ²)	Change in surface runoff (mm water)	Change in forest cover area rank	Change in surface area runoff rank	
1	0·28	−8·75	15		
2	−0·33	3·60	11		
3	0·07	−5·44	14		
4	−1·48	213·34	7		
5	−0·39	191·29	10		
6	−2·66	106·06	3		
7	−1·52	178·85	6		
8	−3·04	137·54	2		
9	0·00	0·00	13		
10	−3·46	168·34	1		
11	−0·58	116·85	9		
12	−1·72	204·32	5		
13	−0·32	29·94	12		
14	−1·85	228·54	4		
15	−1·08	136·31	8		

Question 7(a) and 7(b)

Year	Annual average CPI
2017	103·6
2018	106·0
2019	107·8
2020	108·9
2021	111·6

Question 7(c)

Non–alcoholic beverages	Weights	Price index
Coffee, tea and cocoa	2	115·6
Mineral waters, soft drinks and juices	7	

Question 7(d)

Non-alcoholic beverages	2021	2022
Coffee, tea and cocoa	3	2
Mineral waters, soft drinks and juices	7	7

Question 7(e)

Year	Annual inflation
2017	2·56%
2018	2·29%
2019	1·74%
2020	0·99%
2021	2·52%

Question 8**Data collection**

Take a census of the **110** members of the running club (**50** female runners and **60** male runners).

Each runner will measure their resting heart rate and input the information into the spreadsheet when they come to the club.

Processing and presenting data

Construct a box plot for the resting heart rate of the male runners and a box plot for the resting heart rate of the female runners.

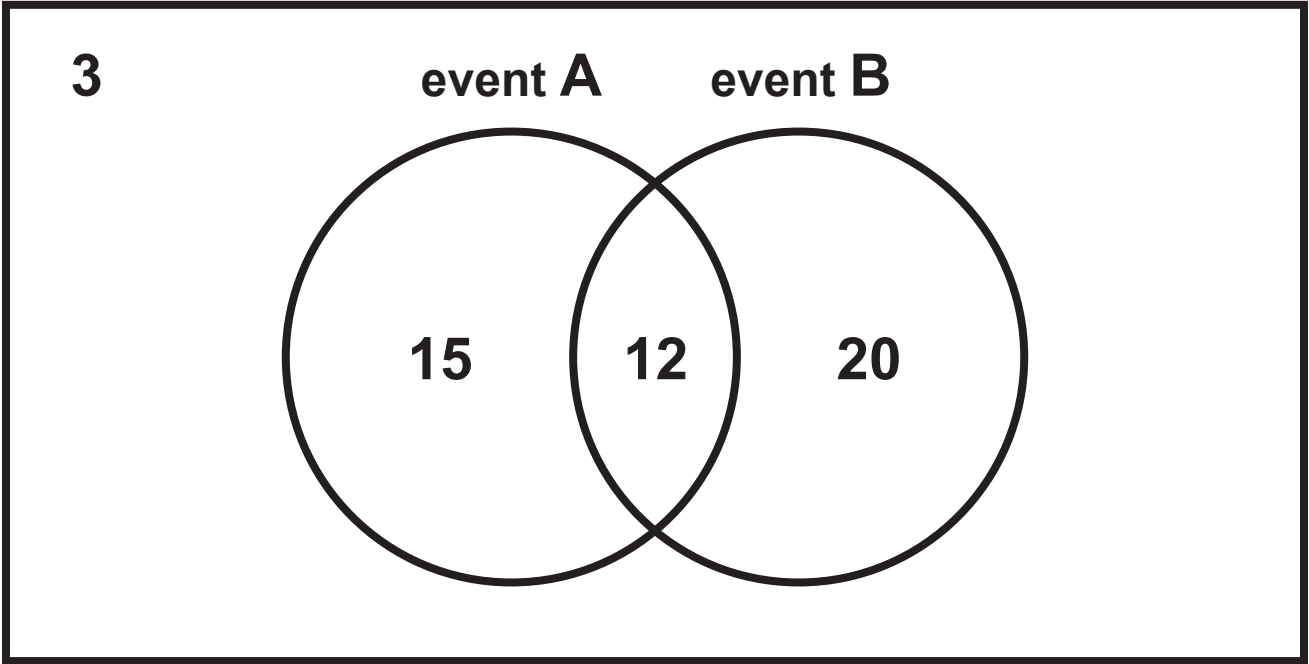
Work out the mean, median and mode for the resting heart rate of the male runners and for the resting heart rate of the female runners.

Work out the standard deviation for the resting heart rate of the male runners and for the resting heart rate of the female runners.

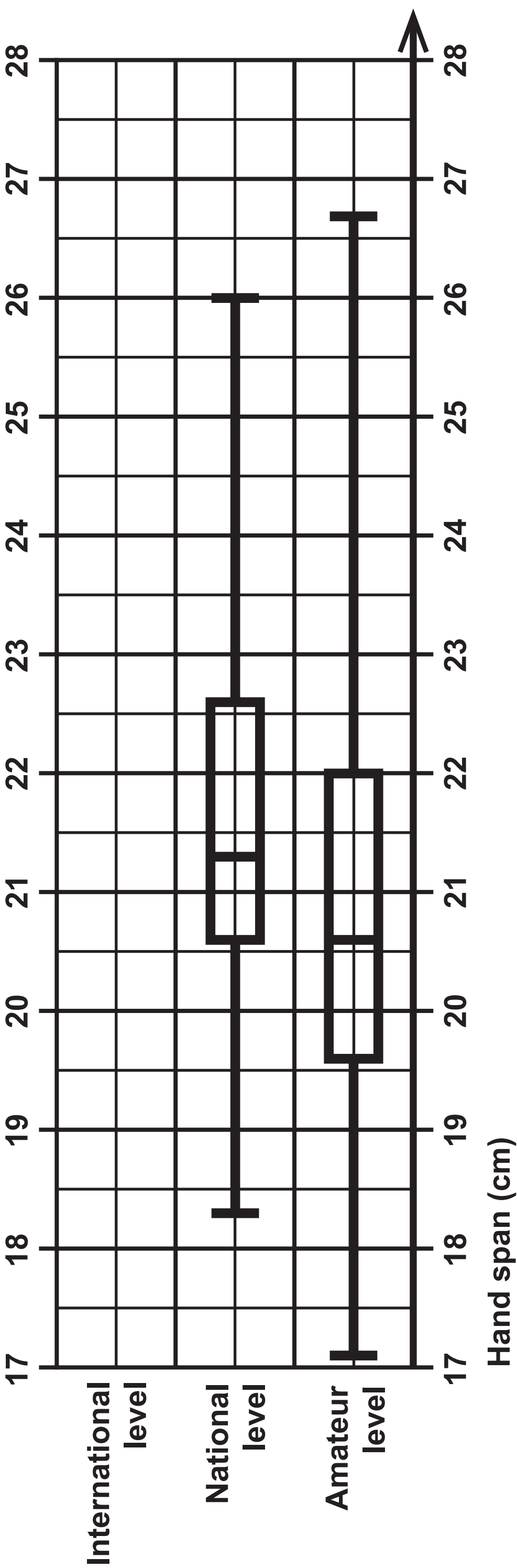
Question 9

	Product moment correlation coefficient	Regression equation
Males		
Femur	0·826	$y = 2·257x + 63·93$
Tibia	0·850	$y = 2·554x + 69·21$
Humerus	0·656	$y = 2·594x + 83·85$
Radius	0·649	$y = 2·641x + 100·91$
Females		
Femur	0·891	$y = 2·340x + 56·99$
Tibia	0·938	$y = 2·699x + 61·08$
Humerus	0·806	$y = 2·827x + 70·94$
Radius	0·580	$y = 2·509x + 96·73$

Question 11(a), 11(b) and 11(c)

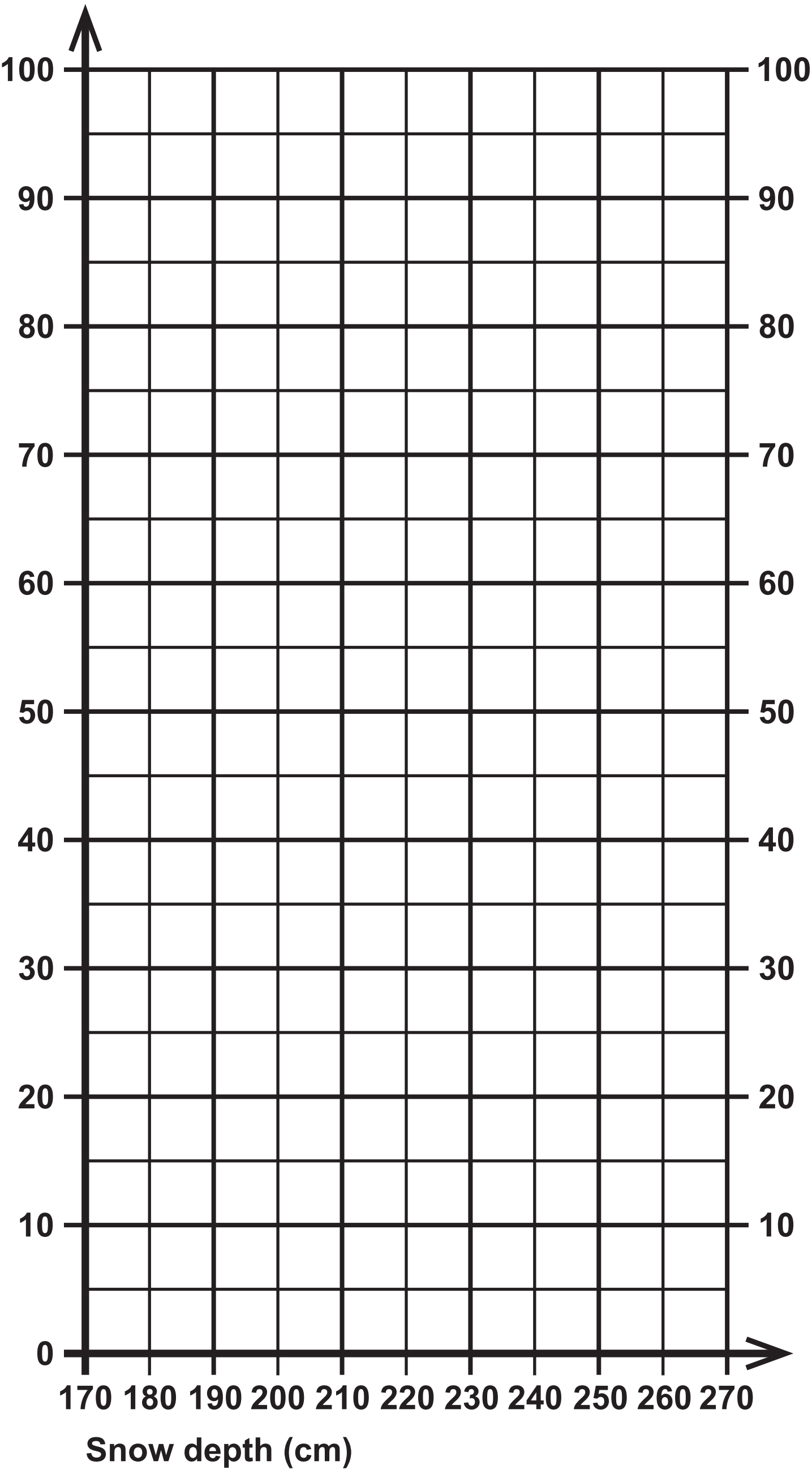


Question 2(a), 2(b) and 2(c)



Question 4(a)

Cumulative frequency



Question 5(a), 5(b) and 5(c)

KEY:

Welsh		England
8	7	
7 6 4 4 4	8	
8 6 5 5 2 1	9	
9 4 0	10	
	11	

Question 6

Area of land	Change in forest cover area (km ²)	Change in surface runoff (mm water)	Change in forest cover area rank	Change in surface area runoff rank	
1	0·28	−8·75	15		
2	−0·33	3·60	11		
3	0·07	−5·44	14		
4	−1·48	213·34	7		
5	−0·39	191·29	10		
6	−2·66	106·06	3		
7	−1·52	178·85	6		
8	−3·04	137·54	2		
9	0·00	0·00	13		
10	−3·46	168·34	1		
11	−0·58	116·85	9		
12	−1·72	204·32	5		
13	−0·32	29·94	12		
14	−1·85	228·54	4		
15	−1·08	136·31	8		

Sources

Question 1(b) and 1(c)
(Source adapted from: worldpopulationreview.com)

Question 2(a), 2(b) and 2(c)
(Source adapted from: www.appca.com.au)

Question 5(a), 5(b) and 5(c)
(Source: www.wru.wales/fixtures-and-teams/teams/wales/)

Question 6
(Source: www.researchgate.net)

Question 7(a) and 7(b)
(Source: www.ons.gov.uk)

Question 7(c)
(Source: www.ons.gov.uk)

Question 7(e)
(Source: worlddata.info)

Question 9
(Source: www.semanticscholar.org)