

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

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

Surname					
Other names					
Centre Number					
Candidate Number					

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

INSTRUCTIONS

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

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7	Question 2(a), 2(b) and 2(c)
8	Question 2(d)
9	Question 3

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32 Question 4(a)

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Question 1(b) and 1(c)

**Mean annual household income in
\$ thousands.**

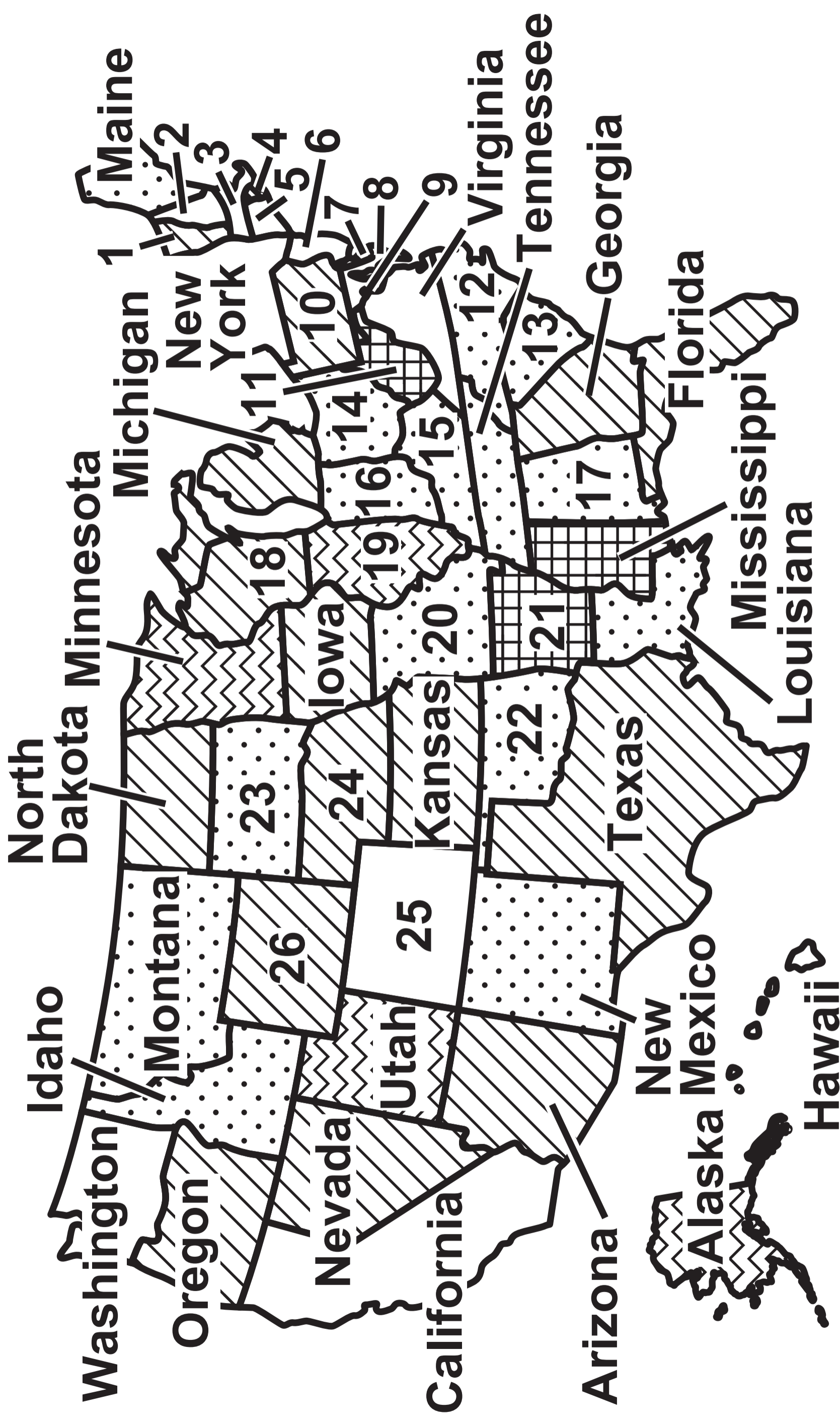
KEY:  **< 70**  **70–80**  **80–90**
 **90–100**  **≥ 100**

- | | |
|------------------------------------|-------------------------|
| 1. Vermont | 14. Ohio |
| 2. New Hampshire | 15. Kentucky |
| 3. Massachusetts | 16. Indiana |
| 4. Rhode Island | 17. Alabama |
| 5. Connecticut | 18. Wisconsin |
| 6. New Jersey | 19. Illinois |
| 7. Delaware | 20. Missouri |
| 8. Maryland | 21. Arkansas |
| 9. District of
Columbia | 22. Oklahoma |
| 10. Pennsylvania | 23. South Dakota |
| 11. West Virginia | 24. Nebraska |
| 12. North Carolina | 25. Colorado |
| 13. South Carolina | 26. Wyoming |

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Question 1(b) and 1(c) continued.

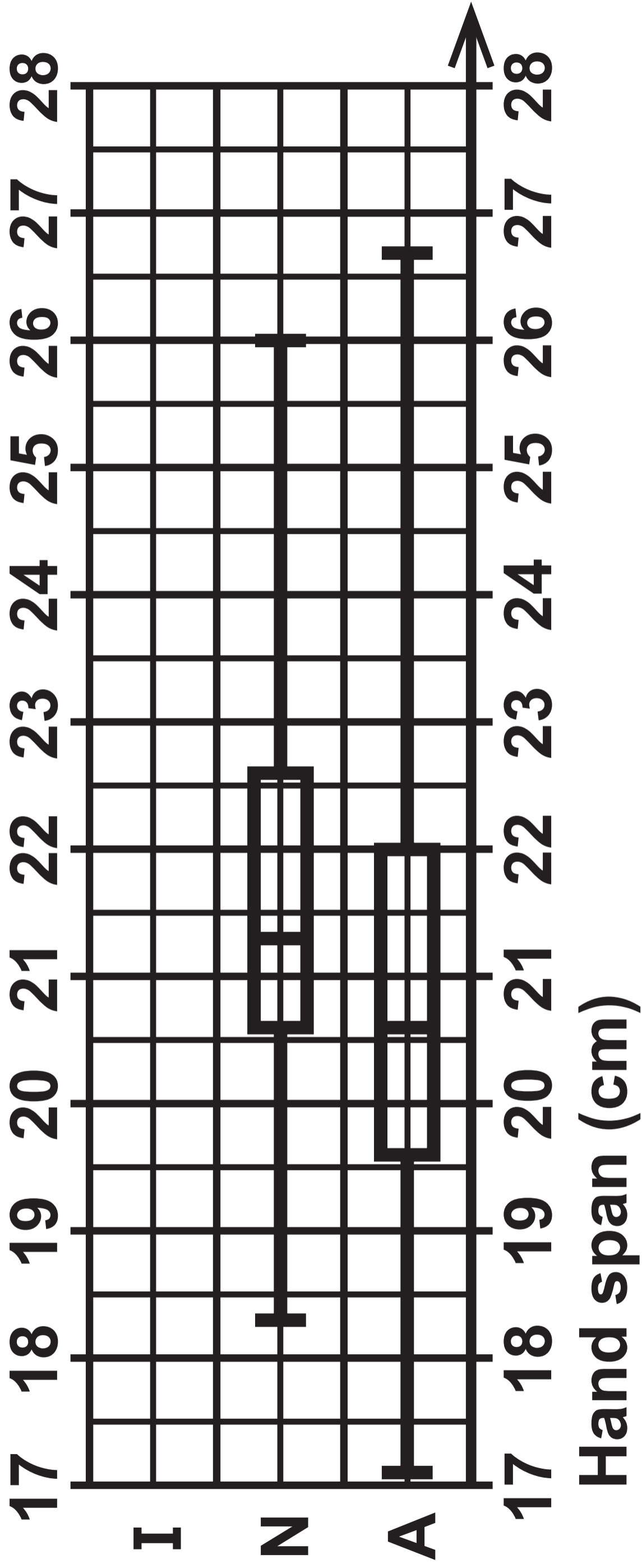


Question 2(a), 2(b) and 2(c)

KEY: I International level

N National level

A Amateur level



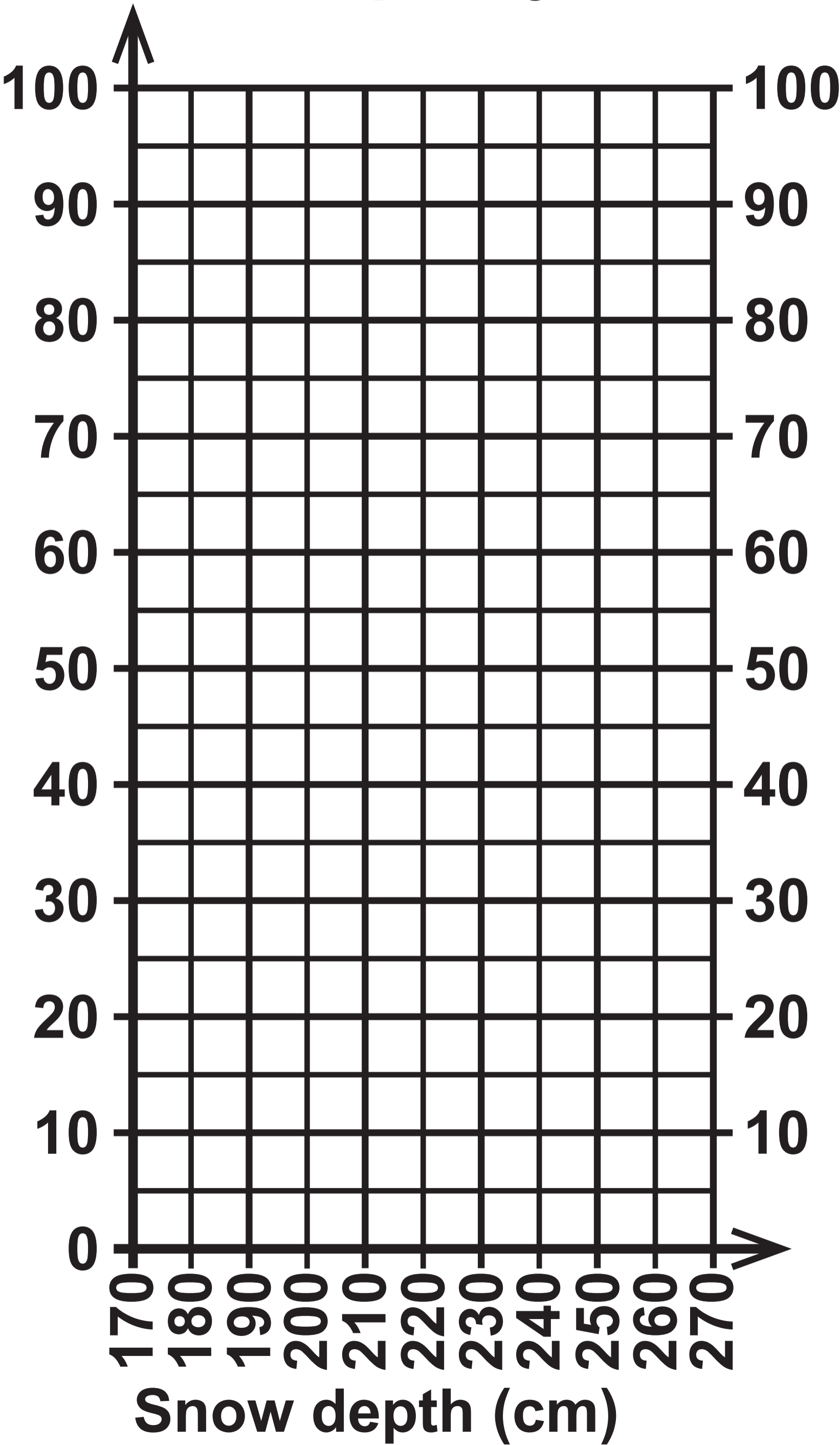
Question 2(d)

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

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
1	0·28	−8·75	15
2	−0·33	3·60	11
3	0·07	−5·44	14
4	−1·48	213·34	7

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Question 6 continued.

Area of land	Change in surface area runoff rank	
1		
2		
3		
4		

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Question 6 continued.

Area of land	Change in forest cover area (km ²)	Change in surface runoff (mm water)	Change in forest cover area rank
5	−0·39	191·29	10
6	−2·66	106·06	3
7	−1·52	178·85	6
8	−3·04	137·54	2

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Turn over

Question 6 continued.

Area of land	Change in surface area runoff rank	
5		
6		
7		
8		

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Turn over

Question 6 continued.

Area of land	Change in forest cover area (km ²)	Change in surface runoff (mm water)	Change in forest cover area rank
9	0·00	0·00	13
10	−3·46	168·34	1
11	−0·58	116·85	9
12	−1·72	204·32	5

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Turn over

Question 6 continued.

Area of land	Change in surface area runoff rank	
9		
10		
11		
12		

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Turn over

Question 6 continued.

Area of land	Change in forest cover area (km ²)	Change in surface runoff (mm water)	Change in forest cover area rank
13	−0·32	29·94	12
14	−1·85	228·54	4
15	−1·08	136·31	8

(continued on the next page)

Question 6 continued.

Area of land	Change in surface area runoff rank	
13		
14		
15		

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.

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Question 8 continued.

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	
Males	
Femur	0.826
Tibia	0.850
Humerus	0.656
Radius	0.649

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Question 9 continued.

	Regression equation
Males	
Femur	$y = 2 \cdot 257x + 63 \cdot 93$
Tibia	$y = 2 \cdot 554x + 69 \cdot 21$
Humerus	$y = 2 \cdot 594x + 83 \cdot 85$
Radius	$y = 2 \cdot 641x + 100 \cdot 91$

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Question 9 continued.

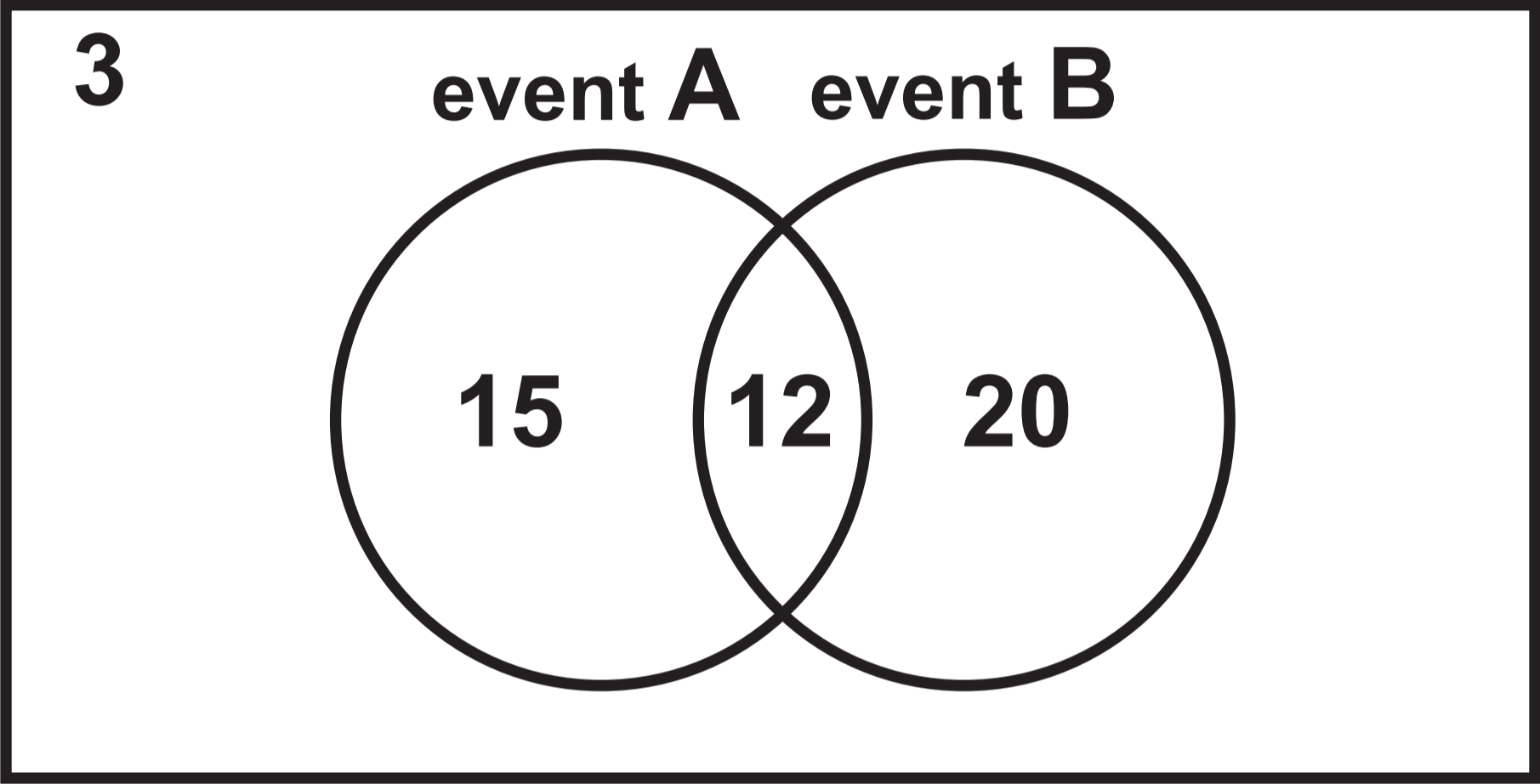
Product moment correlation coefficient	
Females	
Femur	0.891
Tibia	0.938
Humerus	0.806
Radius	0.580

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Question 9 continued.

	Regression equation
Females	
Femur	$y = 2 \cdot 340x + 56 \cdot 99$
Tibia	$y = 2 \cdot 699x + 61 \cdot 08$
Humerus	$y = 2 \cdot 827x + 70 \cdot 94$
Radius	$y = 2 \cdot 509x + 96 \cdot 73$

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

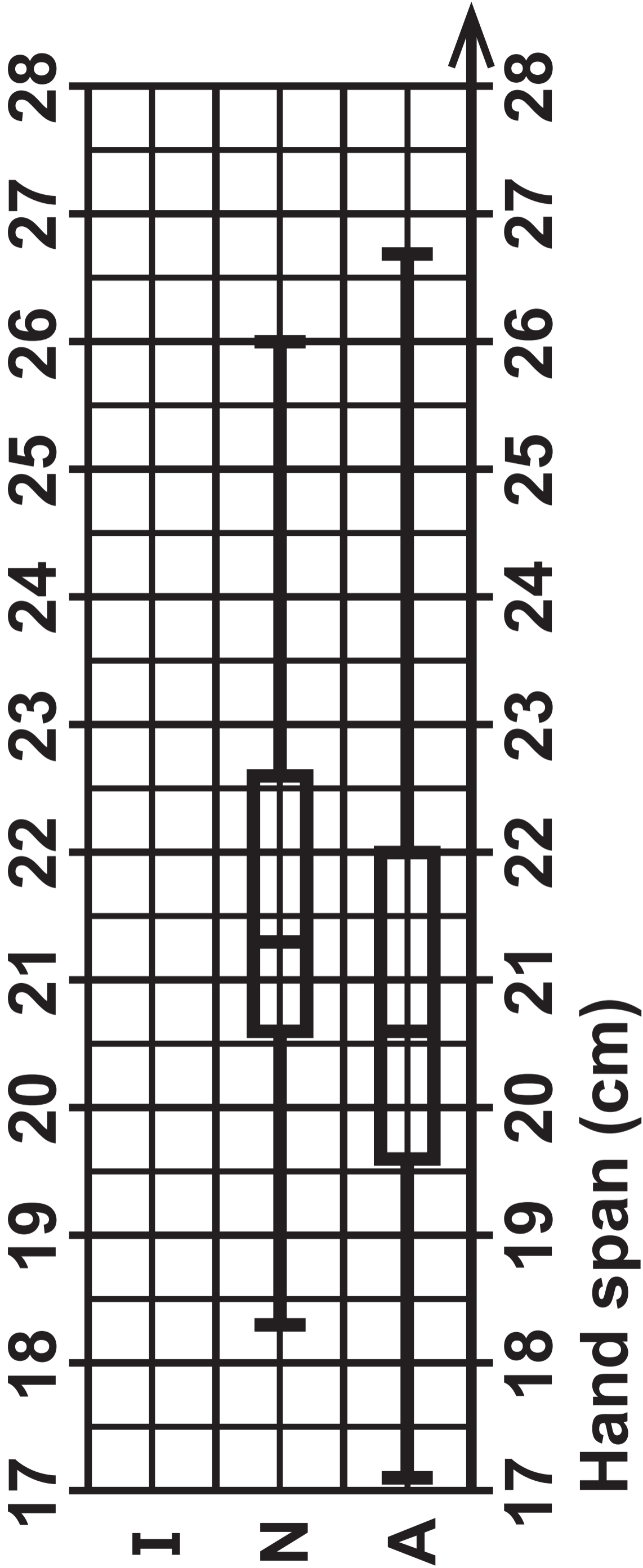


Question 2(a), 2(b) and 2(c)

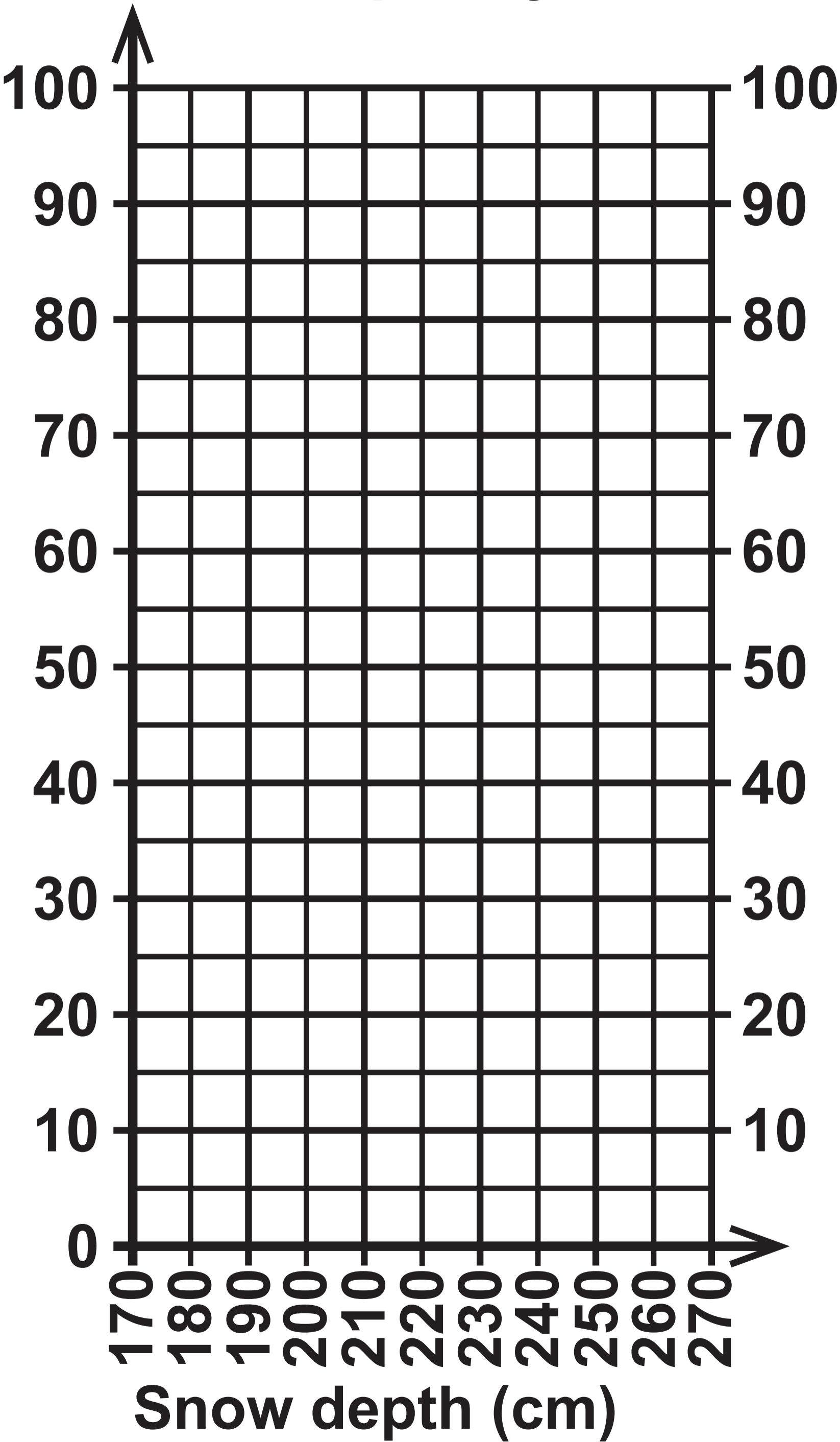
KEY: I International level

N National level

A Amateur level



Cumulative frequency



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

KEY:

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

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Area of land	Change in surface area runoff rank	
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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)

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Turn over

Sources continued.

Question 7(c)

(Source: www.ons.gov.uk)

Question 7(e)

(Source: worlddata.info)

Question 9

(Source: www.semanticscholar.org)