

r/IGCSE Resources

Topical Worksheets for Cambridge IGCSE™ Mathematics (0580/0980)

Statistics

1 The table shows the number of people in different age groups at a cinema.

Age (y years)	15 < y ≤ 25	$25 < y \leqslant 30$	$30 < y \leqslant 50$	50 < y ≤ 80
Number of people	35	32	44	12

Dexter draws a histogram to show this information.

The height of the bar he draws for the group $15 < y \le 25$ is 7 cm.

Calculate the height of each of the remaining bars.

$25 < y \le 30$	cm	
$30 < y \le 50$	cm	
$50 < y \le 80$	cm	[3]

[Total: 3]

The heights, h metres, of the 120 boys in an athletics club are recorded. The table shows information about the heights of the boys.

Height (h metres)	$1.3 < h \leqslant 1.4$	$1.4 < h \leqslant 1.5$	$1.5 < h \leqslant 1.6$	$1.6 < h \leqslant 1.7$	$1.7 < h \leqslant 1.8$	$1.8 < h \le 1.9$
Frequency	7	18	30	24	27	14

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$$\dots \qquad < h \leqslant \dots \qquad [1]$$

 (i) One boy is chosen at random from the club. Find the probability that this boy has a height greater than 1.8 m. (ii) Three boys are chosen at random from the club. Calculate the probability that one of the boys has a height greater than 1.8 m and the boys each have a height of 1.4 m or less. (c) (i) Use the frequency table to complete the cumulative frequency table. Height h metres) 		(ii)	Calculate an esti	mate of the mea	n height.				
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	(c)	(i)	Use the frequence	cy table to comp	lete the cumulati	ve frequency tal	ble.		
		es)	<i>h</i> ≤ 1.4	<i>h</i> ≤ 1.5	<i>h</i> ≤ 1.6	<i>h</i> ≤ 1.7	<i>h</i> ≤ 1.8	<i>h</i> ≤ 1	.9

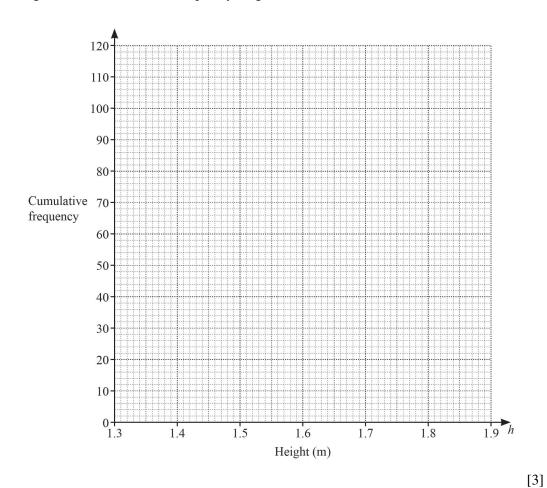
Cumulative

frequency

7

25

(ii) On the grid, draw a cumulative frequency diagram to show this information.



(d) Use your diagram to find an estimate for

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..... m [1]

(ii) the 40th percentile.

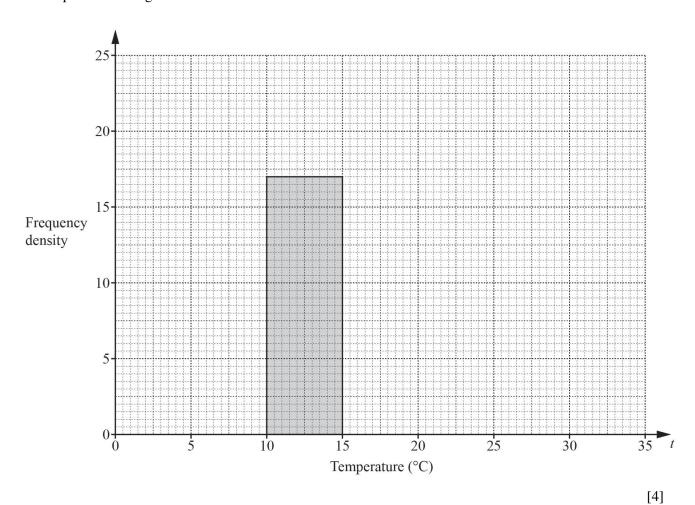
..... m [2]

[Total: 18]

3 During one year the midday temperatures, t° C, in Zedford were recorded. The table shows the results.

Temperature (t° C)	$0 < t \leqslant 10$	$10 < t \leqslant 15$	$15 < t \leqslant 20$	$20 < t \leqslant 25$	$25 < t \leqslant 35$
Number of days	50	85	100	120	10

Complete the histogram to show the information in the table.



[Total: 4]

4 During one year the midday temperatures, t° C, in Zedford were recorded. The table shows the results.

Temperature (t° C)	$0 < t \leqslant 10$	$10 < t \leqslant 15$	$15 < t \leqslant 20$	$20 < t \leqslant 25$	$25 < t \leqslant 35$
Number of days	50	85	100	120	10

Calculate an estimate of the mean.

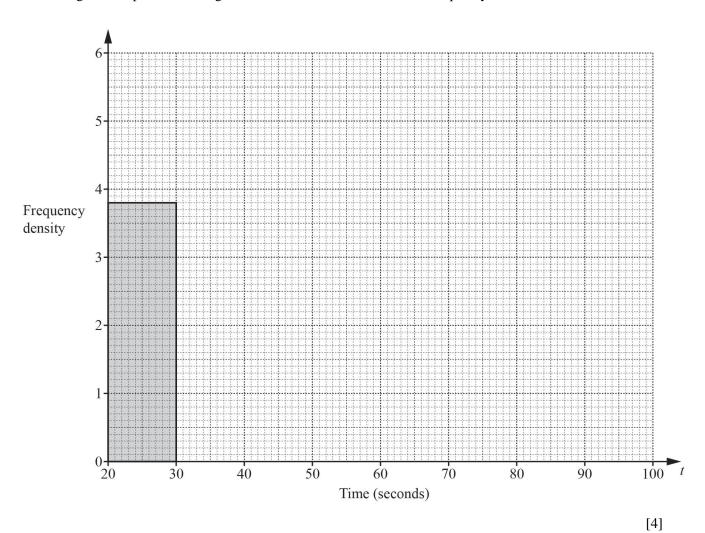
°C	[4]

[Total: 4]

5 The table shows the time, t seconds, taken by each of 120 boys to solve a puzzle.

Time (t seconds)	$20 < t \leqslant 30$	$30 < t \leqslant 35$	$35 < t \leqslant 40$	$40 < t \leqslant 60$	60 < <i>t</i> ≤ 100
Frequency	38	27	21	16	18

On the grid, complete the histogram to show the information in the frequency table.



[Total: 4]



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Acknowledgements and Information:

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