## CIE Probability & Statistics 1

分类真题

2020-2022 册

A Level Clouds 出品

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Chapter 1 Representation of Data 1

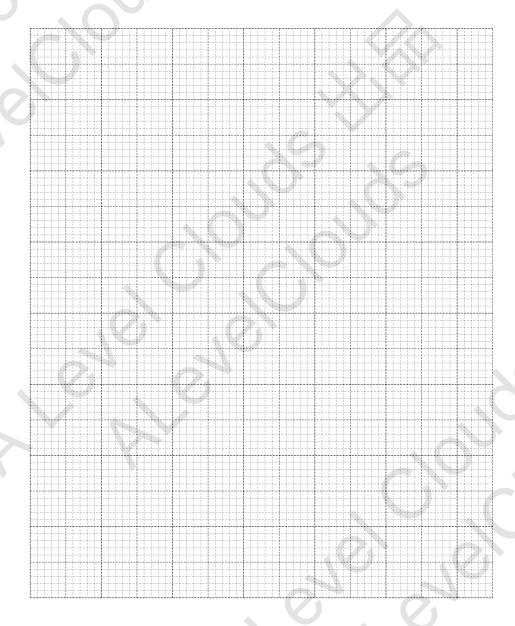
## Q1: 9709/52/M20

7 Helen measures the lengths of 150 fish of a certain species in a large pond. These lengths, correct to the nearest centimetre, are summarised in the following table.

Length (cm)	0 – 9	10 – 14	15 – 19	20 – 30
Frequency	15	48	66	21

(a) Draw a cumulative frequency graph to illustrate the data.

[4]



<b>(b)</b>	40% of these fish have a length of $d$ cm or more. Use your graph to estimate the value of $d$ .	[2]
		•••••
The	mean length of these 150 fish is 15.295 cm.	
(c)	Calculate an estimate for the variance of the lengths of the fish.	[3]
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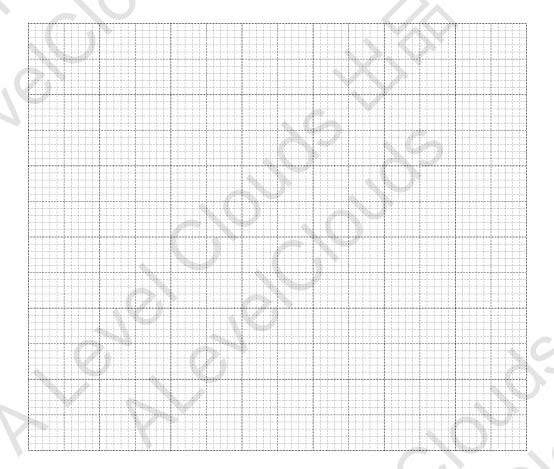
## Q2: 9709/51/S20

7 The numbers of chocolate bars sold per day in a cinema over a period of 100 days are summarised in the following table.

Number of chocolate bars sold	1 – 10	11 – 15	16 – 30	31 – 50	51 – 60
Number of days	18	24	30	20	8

(a) Draw a histogram to represent this information.

[5]



(c) Calculate estimates of the mean and standard deviation of the number of chocolate bars	<b>(b)</b>	What is the greatest possible value of the interquartile range	e for the data?
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