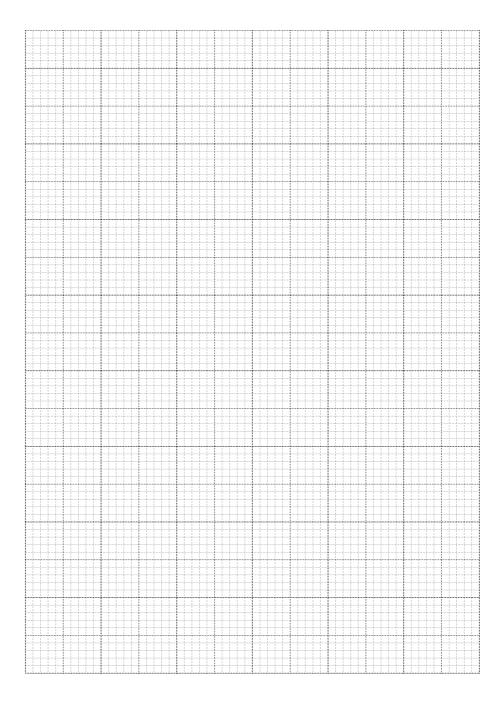
6 The times, *t* minutes, taken by 150 students to complete a particular challenge are summarised in the following cumulative frequency table.

Time taken (t minutes)	<i>t</i> ≤ 20	<i>t</i> ≤ 30	<i>t</i> ≤ 40	<i>t</i> ≤ 60	<i>t</i> ≤ 100
Cumulative frequency	12	48	106	134	150

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

[2]



(b)	24% of the students take k minutes or longer to complete the challenge. Use your graph estimate the value of k .	1 to [2]
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		••••
(c)	Calculate estimates of the mean and the standard deviation of the time taken to complete challenge.	the [6]
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