5 The time, t minutes, taken by each of 80 people to travel to work is recorded.
The table shows information about these times.

Time (t minutes)	$0 < t \leqslant 5$	$5 < t \leqslant 10$	$10 < t \leqslant 20$	$20 < t \leqslant 35$	$35 < t \leqslant 60$
Frequency	3	7	18	28	24

(a) (i) Write down the class interval containing the median time.

..... $< t \leqslant$ ..... [1]

(ii) Calculate an estimate of the mean time.

..... min [4]

(b) (i) One of these 80 people is chosen at random.

Find the probability that this person took longer than 10 minutes to travel to work.
Give your answer as a fraction in its simplest form.

..... [2]

(ii) Two people are chosen at random from those taking 20 minutes or less to travel to work.

Calculate the probability that one of these people took 5 minutes or less and the other took more than 5 minutes.

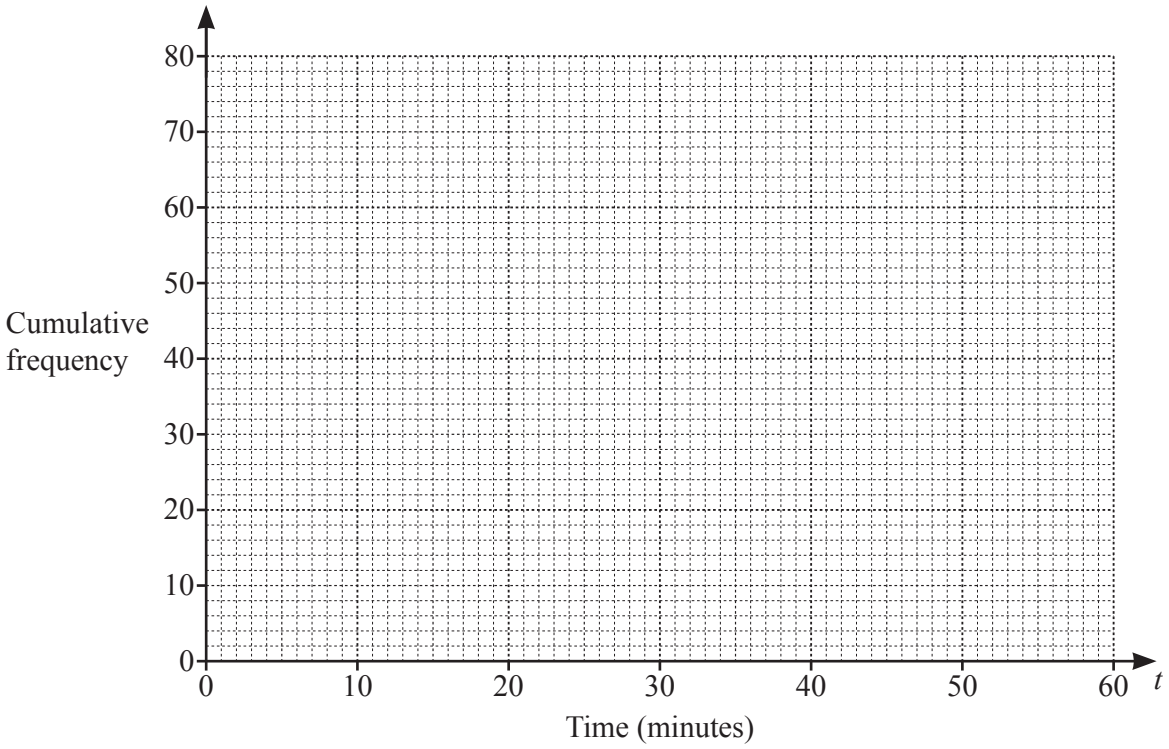
..... [3]

(c) (i) Use the frequency table on page 8 to complete the cumulative frequency table.

Time (t minutes)	$t \leqslant 5$	$t \leqslant 10$	$t \leqslant 20$	$t \leqslant 35$	$t \leqslant 60$
Cumulative frequency	3	10			80

[1]

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



[3]

(iii) Find an estimate for the 80th percentile.

..... min [2]

(iv) Find an estimate for the percentage of people who took longer than 45 minutes to travel to work.
Show all your working.

..... % [3]