1 The table gives information about the length of time, in minutes, that each of 60 students took to travel to school on Monday.

midpoints:

	Length of time (t minutes)	Frequency
5	$0 < t \leqslant 10$	4
15	$10 < t \leqslant 20$	10
25	$20 < t \leqslant 30$	15
35	$30 < t \leqslant 40$	25
45	$40 < t \leqslant 50$	6

Work out an estimate for the mean length of time taken by these 60 students to travel to school on Monday.
Give your answer correct to one decimal place.

mean = $\dfrac{\text{sum of entries}}{\text{no. of entries}}$ "estimate" so work out the midpoints of each range

sum of entries = $5 \times 4 + 15 \times 10 + 25 \times 15 + 35 \times 25 + 45 \times 6$

= 1690 ②

mean = $\dfrac{1690 \,①}{60}$ = 28·166... = 28·2 (1 d.p)

↑   ↑
given in question   ·6 > ·5 so round up

.................28·2................. ① minutes

(Total for Question 1 is 4 marks)