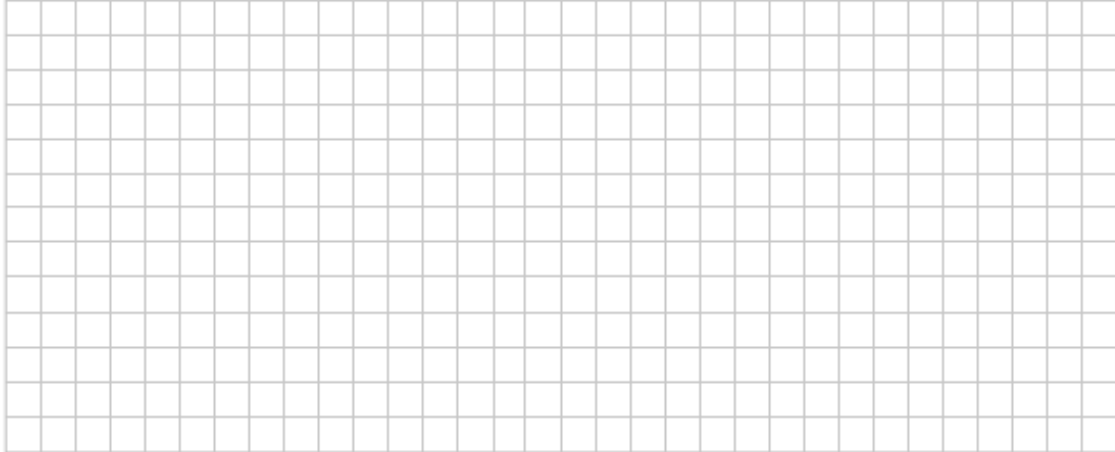


Speed challenging questions from HL maths

2019 HL P1 Q3c

- (c)** Lewis was driving at 90 km per hour when he sneezed.  
During the sneeze, his eyes were closed for half a second.  
Work out how many metres he travelled in this time.



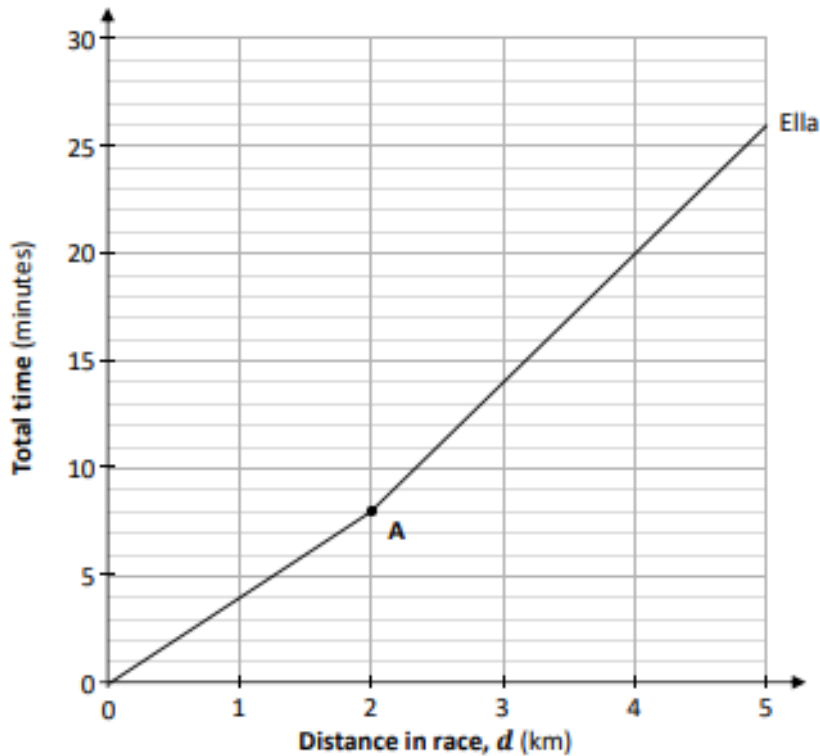
# 2019 HL P1 Q6

## Question 6

(Suggested maximum time: 20 minutes)

Poppy and Ella ran a 5 km race. The simplified graph below shows the time that it took Ella to run  $d$  km during the race. One of the points on the graph is marked **A**.

Distance is on the horizontal axis so, for example, it took Ella 26 minutes to run the whole 5 km.



The table below shows the total time that it took Poppy and Ella to run each of the given distances in the race.

- (a) Using the figures in the table, **draw** a graph on the diagram above to show the time it took **Poppy** to run  $d$  km during the race, for  $0 \leq d \leq 5$  and  $d \in \mathbb{R}$ .
- (b) Using **Ella's** graph, fill in the three missing values in the table below.

Distance in the race (km)	Total time taken for Poppy (minutes)	Total time taken for Ella (minutes)
1	5	4
2	10	
3	17	
4	24	
5	30	26

(c) not relevant to science exam









