

Speed,
Distance,
Time

November 2021 Paper 3

11 A train travels x miles in 2 hours.

(b) Write down an expression, in terms of x , for the average speed of the train.

..... miles per hour
(1)

November 2023 Paper 2

12 A car travels at an average speed of 37 miles per hour for 3 hours.

Work out the distance that the car travels in the 3 hours.

..... miles

(Total for Question 12 is 2 marks)

June 2024 Paper 2

14 On Monday, Lizzie cycled 36 kilometres in 3 hours.

(a) Work out Lizzie's average speed.

..... kilometres per hour
(2)

On Tuesday, Lizzie cycled 36 kilometres at an average speed of 16 kilometres per hour.

Lizzie says that the total time she cycled on Monday and Tuesday was less than 5 hours 20 minutes.

(b) Is Lizzie correct?

You must show how you get your answer.

(3)

(Total for Question 14 is 5 marks)

November 2022 Paper 1

14 Jenny drives from London to Swindon at an average speed of 54 miles per hour.

She drives for $1\frac{1}{2}$ hours.

(a) Work out the distance from London to Swindon.

..... miles

(2)

June 2023 Paper 2

16 Paulo drives at an average speed of 56 km/h for 1 hour 45 minutes.

Work out the distance Paulo drives.

..... km

(Total for Question 16 is 3 marks)

June 2022 Paper 1

16 Savio leaves his home at 0730 to drive to work.

He drives a distance of 50 miles.

Savio thinks he drives at an average speed of 40 miles per hour.

(a) If Savio is correct, at what time will he arrive at work?

.....
(3)

In fact, Savio's average speed was greater than 40 miles per hour.

(b) How does this affect your answer to part (a)?

.....
.....
.....
(1)

.....
(Total for Question 16 is 4 marks)
.....

November 2021 Paper 3

24 A water tank is empty.

Anil needs to fill the tank with 2400 litres of water.

Company **A** supplies water at a rate of 8 litres in 1 minute 40 seconds.

Company **B** supplies water at a rate of 2.2 gallons per minute.

1 gallon = 4.54 litres

Company **A** would take more time to fill the tank than Company **B** would take to fill the tank.

How much more time?

Give your answer in minutes correct to the nearest minute.

..... minutes

(Total for Question 24 is 4 marks)

June 2020 Paper 3

- 24** Andy cycles a distance of 30 km at an average speed of 24 km/h.
He then runs a distance of 12 km at an average speed of 8 km/h.

Work out the total time Andy takes.

Give your answer in hours and minutes.

..... hours minutes

(Total for Question 24 is 3 marks)

June 2023 Paper 3

25 Lava flows from a volcano at a constant rate of $11.9 \text{ m}^3/\text{s}$

How many days does it take for $67\,205\,600 \text{ m}^3$ of lava to flow from the volcano?
Give your answer correct to the nearest day.

..... days

(Total for Question 25 is 3 marks)

November 2023 Paper 3

26 Riley travelled by car and by aeroplane.

He travelled 143 miles by car at an average speed of 55 miles per hour.
Riley then travelled for 5 hours and 20 minutes by aeroplane.

Work out, in hours and minutes, Riley's total travelling time.

..... hours minutes

(Total for Question 26 is 3 marks)

June 2022 Paper 3

- 27 Jessica runs for 15 minutes at an average speed of 6 miles per hour.
She then runs for 40 minutes at an average speed of 9 miles per hour.

It takes Amy 45 minutes to run the same total distance that Jessica runs.

Work out Amy's average speed.

Give your answer in miles per hour.

..... miles per hour

(Total for Question 27 is 4 marks)