Name:

Exam Style Questions

Speed, Distance, Time

Corbettmaths

Equipment needed: Pen and Calculator

Guidance

1. Read each question carefully before you begin answering it.
2. Check your answers seem right.
3. Always show your workings

Video Tutorial

www.corbettmaths.com/contents

Video 299

Answers and Video Solutions

1. A car drives 120 miles in 3 hours.

Calculate the average speed, in mph, of the car.

.....mph

(2)

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2. A lorry travels 100 miles at an average speed of 25 mph.

Work out how long the journey lasts.

.....hours

(2)

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3. A pigeon flies for 7 hours at a speed of 70 km/h.

Calculate how far the pigeon flies.

.....km

(2)

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4. Matthew jogs 300 metres at 4m/s.

Work out how long it takes Matthew.

.....seconds

(2)

5. A helicopter flies 240 miles in 2 hours 30 minutes.

Calculate the average speed, in mph, of the helicopter.

.....mph

(2)

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6. Harry cycles 8 kilometres in 30 minutes.

Calculate his average speed, in km/h.

.....km/h

(2)

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7. Arlo drives from Coventry to Shrewsbury at an average speed of 42mph.

The journey takes $1\frac{1}{2}$ hours.

Work out the distance from Coventry to Shrewsbury.

.....miles

(2)

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8. Edith leaves her home at 11:50 am.
She travels 75 miles at an average speed of 30 mph.

At what time does she finish the journey.

.....

(3)

9. Fiona drives for 4 hours.
Her average speed is 25.5 mph.

How far does Fiona drive?

.....miles
(2)

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10. A plane travels at an average speed of 550km/h.
The plane travels 3300 kilometres.

Calculate how long the plane journey took.

.....
(2)

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11. The distance between two cities is 2898 miles.
The plane journey took 6 hours.

Calculate the average speed of the plane.

.....
(2)

12. Thomas drove from Junction 2 to Junction 3 on a road.
The distance between the junctions is 12 miles and it takes 15 minutes.

Hannah also drove from Junction 2 to Junction 3 on the same road.
She drove at an average speed of 50 mph.

Who has the faster speed?
Explain your answer.

Faster speed .....

.....

.....

.....

(4)

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13 Roger drives for 2 hours 15 minutes at an average speed of 36 mph.

How far does Roger drive?

.....miles

(2)

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14 Martin runs 2 kilometres in 2 minutes.

Calculate his average speed.
Give your answer in m/s

.....m/s

(3)

15. Victoria walks 11 kilometres at a speed of 4 km/h

Calculate how long it takes Victoria.
Give your answer in hours and minutes.

.....hours .....minutes
(3)

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16. A car travels 240 kilometres in 3 hours 20 minutes.

Calculate the average speed, in km/h, of the car.

.....km/h
(3)

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17. Richard drives 110 miles to the hotel.

His journey takes $2\frac{1}{2}$ hours.

Work out his average speed.

.....mph
(2)

18. The distance from Leek to Milton is 310 miles.
A train travels this distance in 4 hours 15 minutes.

Calculate the average speed of the train.

.....mph
(3)

19.

A village is 20 miles from Belfast.

Conor drives from the village to Belfast at 40mph
Kelly drives from the village to Belfast at 50mph

Work out how much longer the journey takes Conor.
Give your answer in minutes.

.....minutes
(3)

20. Bethan drives from Truro to Taunton, a distance of 120 miles.

Bethan leaves at 13:40 and drives at an average speed of 50 miles per hour.

Work out what time Bethan arrives in Taunton.

.....

(3)

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21. A dog runs 100 metres in 4.98 seconds.

Estimate his average speed in kilometres per hour.

.....km/h

(4)

22. Josie departs her home in Banbridge and drives to visit her friend in Portrush.

She drives a distance of 80 miles and arrives at her friend's house at 4:25pm

Josie assumes she drove at an average speed of 48 miles per hour.

(a) If Josie is correct, what time did she depart Banbridge?

.....

(3)

In fact, Josie's average speed was less than 48 miles per hour.

(b) How does this affect the departure time?

……

……

(1)

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23. A bicycle travels at an average speed of x km/h for 3 hours.

Write down an expression, in terms of x, for the total distance, in kilometres, travelled by the bicycle.

.....km

(1)

24. Lee complete a journey in three stages.

In stage 1 of his journey, he drives at an average speed of 30km/h for 45 minutes.

(a) How far does Lee travel in stage 1 of his journey?

.....km

(2)

In stage 2 of his journey, Lee drives at an average speed of 50km/h for 2 hours 48 minutes.

Altogether, over all three stages, Lee drives 200 km in 4 hours.

What is his average speed, in km/h, in stage 3 of his journey?

.....km/h

(3)

25. Samuel is taking part in a race that has a running stage and then a cycling stage.

He completes the 35km race in $1\frac{1}{4}$ hours.

Samuel completes the 5km running stage at an average speed of 12km/h

Work out his average speed for cycling stage of the race.

.....km/h

(3)

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26. The Dennison family are travelling home from their holiday.

They drive 25.6 miles at an average speed of 32 mph.
Then they drive a further 94.5 miles at an average speed of 54 mph.

Work out the total time it takes the Dennison family to return home.
Give your answer in hours and minutes.

…….hours .....minutes

(3)

27. Convert 5km/h into m/s.

.....m/s

(2)

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28. Change 45 metres per second into kilometres per hour.

.....km/h

(2)

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29. The speed limit on a road is 50 mph.

A car drives 19 miles in 22 minutes.

Is the car breaking the speed limit?
You must show your workings.

(3)

30. Drone A has a maximum speed of 35 mph
Drone B has a maximum speed of 57 km/h

1 mile ≈ 1.6 kilometres

Which drone has the greater maximum speed?
Show your workings.

(2)

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31. Isla runs 800 metres in 2 minutes
Olivia cycles 800 metres at a speed of 30 km/h

Work out how much less time it takes Olivia than Isla.

……seconds
(3)

32. Maxwell drives for 20 minutes at an average speed of 30 miles per hour.
He then joins the main road and drives at an average speed of 48 miles per hour for 45 minutes.

Hayden drives the same distance as Maxwell, on the motorway, and it takes him 17 **less** minutes.

Work out Hayden's average speed.

.....mph
(4)

33. A motorbike and a car take part in a race along a straight road.
The distance between the start line and finish line is 8 miles.

The motorbike crosses the start line at 50mph and stays at that speed.

One minute later, the car crosses the start line travelling at a certain speed and remains at that speed.

After two more minutes, the car overtakes the motorbike.

How long after the car crosses the finish line, does the motorbike cross the finish line?

.....

(5)