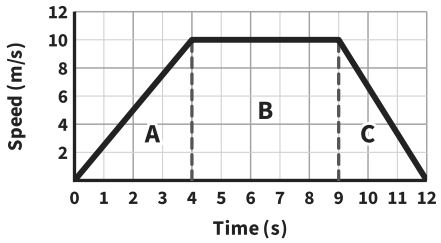
Speed-Time Graphs: Distance

1

Find the distance travelled.



A = ½ × 4 × 10 = 20

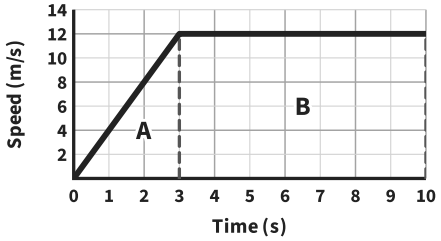
B = 5 × 10 = 50

C = _____

Distance _____ m

2

Find the distance travelled.



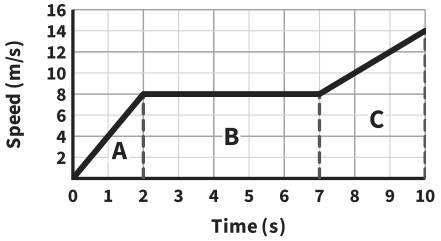
A = ½ × 3 × 12 = 18

B = _____

Distance _____ m

3

Find the distance travelled.



A = _____

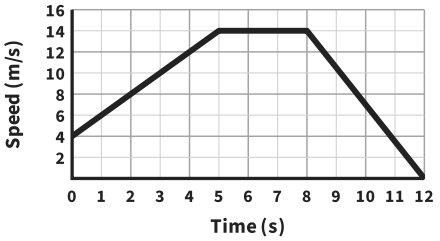
B = _____

C = _____

Distance _____ m

4

Split the area into shapes.
Find the distance travelled.



A = _____

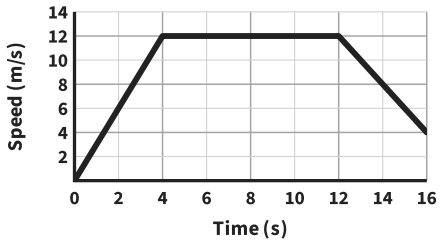
B = _____

C = _____

Distance _____ m

5

Find the distance travelled. Then find the average speed for the whole journey.



_____

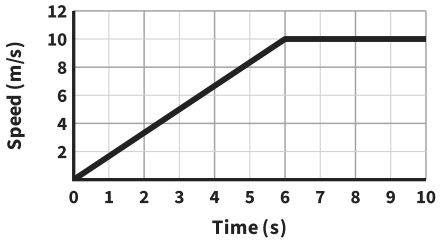
_____

_____

Average speed _____ m/s

6

Jo finds the distance travelled:
6 × 10 + 4 × 10 = 100 m.
Explain Jo's mistake.
Then find the distance.



_____

_____

Distance _____ m

7

A bus speeds up steadily from rest to 12 m/s in 8 seconds. It then travels at 12 m/s for 25 seconds. How far does the bus travel?

_____

_____

Distance _____ m

8

A cyclist rides at 6 m/s for 30 seconds. She then slows down steadily and stops 10 seconds later. Find her average speed.

_____

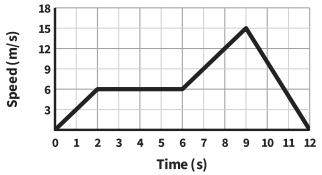
_____

Average speed _____ m/s

Speed-Time Graphs: Distance *further practice*

9

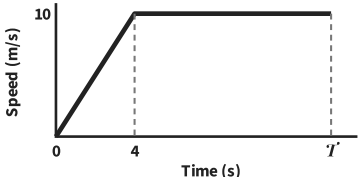
Find the distance travelled.



Answer _____

10

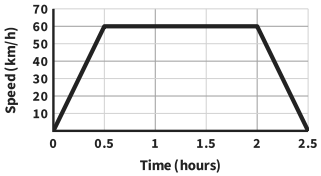
A scooter's journey is shown in the sketch. It travels 120 m. Find T.



Answer _____

11

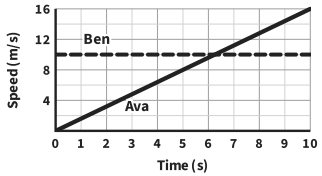
The graph shows a coach journey.
How far does the coach travel?
Give your answer in km.



Answer _____

12

Ava and Ben set off together.
The graph shows their speeds for 10 seconds. Who travels further in that time, and by how much?



Answer _____

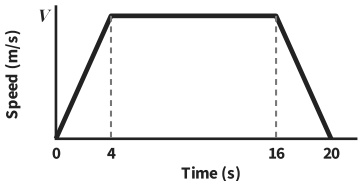
13

A car speeds up steadily from rest for 8 seconds and travels 60 m.
Find its speed after 8 seconds.
Then find its acceleration.

Answer _____

14

The sketch shows a train's journey between two stations.
Its average speed is 10 m/s. Find V.



Answer _____

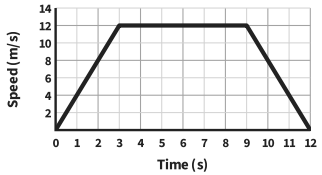
15

A car is travelling at 18 m/s.
The driver sees a hazard 60 m ahead.
After 0.8 seconds she brakes, and the car slows down steadily and stops 5 seconds later. Does the car stop before the hazard?

Answer _____

16

Mo says the distance travelled is
12 × 12 = 144 m.
Explain Mo's mistake.
Then find the distance.



Answer _____