

Quiz

Speed, Distance, Time



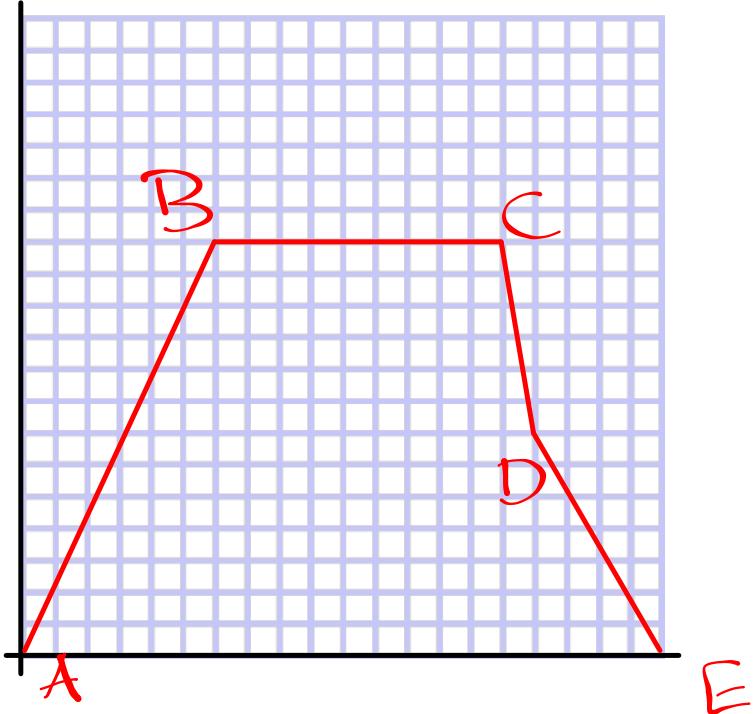
Distance-time graphs

SMART
Technologies



Label the graph.

Click here
for the
answer

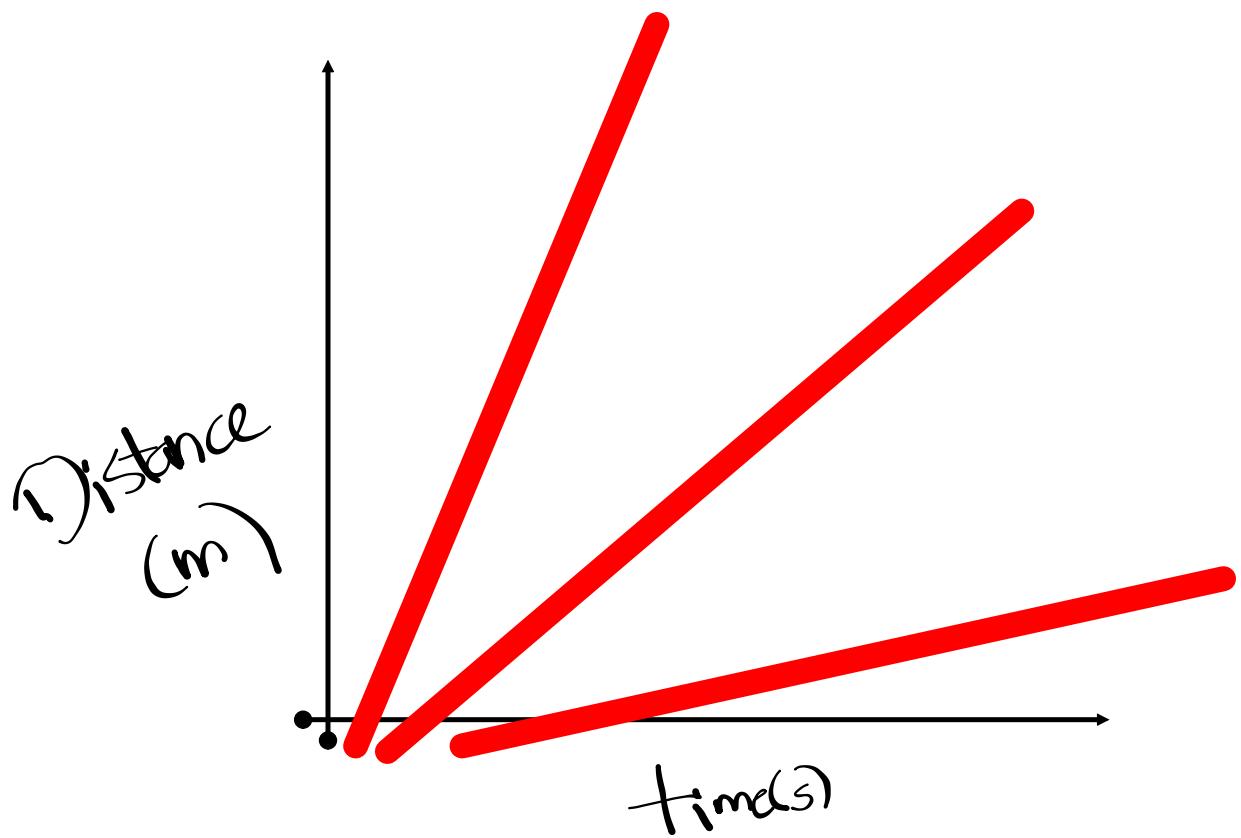


distance

(km)
time

(h)
moving

stationary



Calculating Speed

To calculate the actual speed on a distance time graph you calculate the slope using two points on the graph and the following formula:

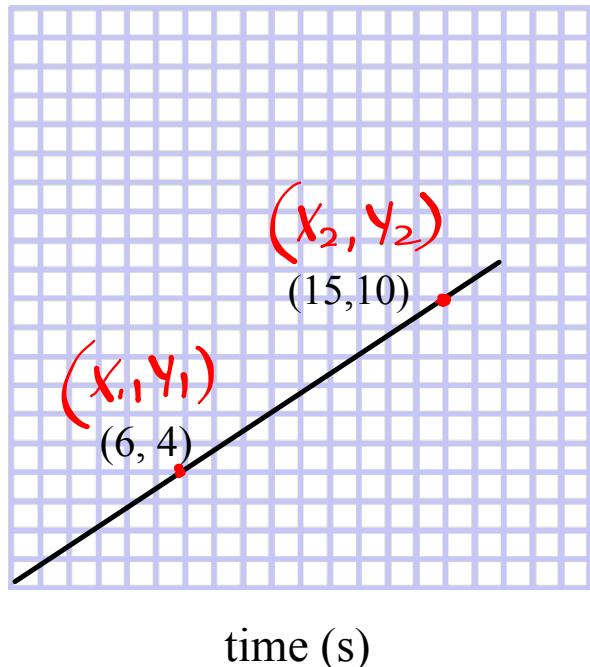
$$v = \frac{\Delta d}{\Delta t} = \frac{y_2 - y_1}{x_2 - x_1}$$

$$\text{i.e. } v = \frac{10\text{m} - 4\text{m}}{15\text{s} - 6\text{s}}$$

$$v = \frac{6\text{m}}{9\text{s}}$$

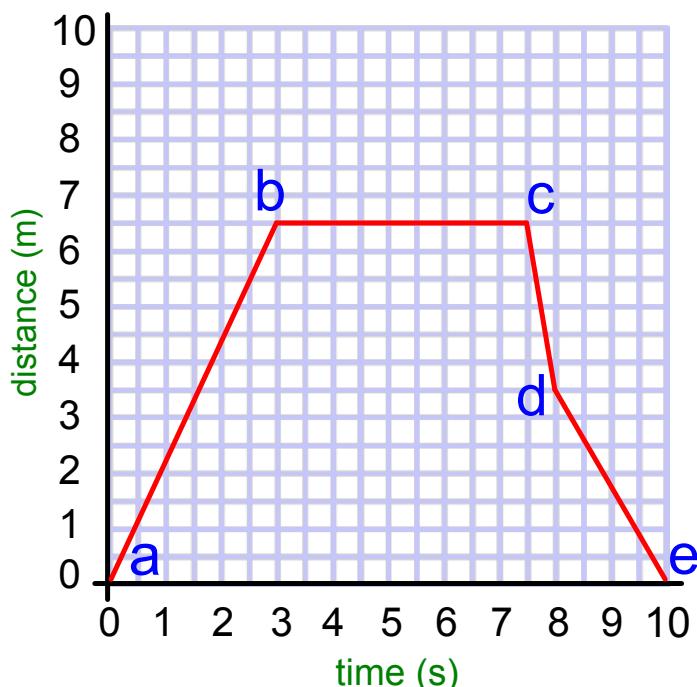
$$v = 0.67 \text{ m/s}$$

distance (m)





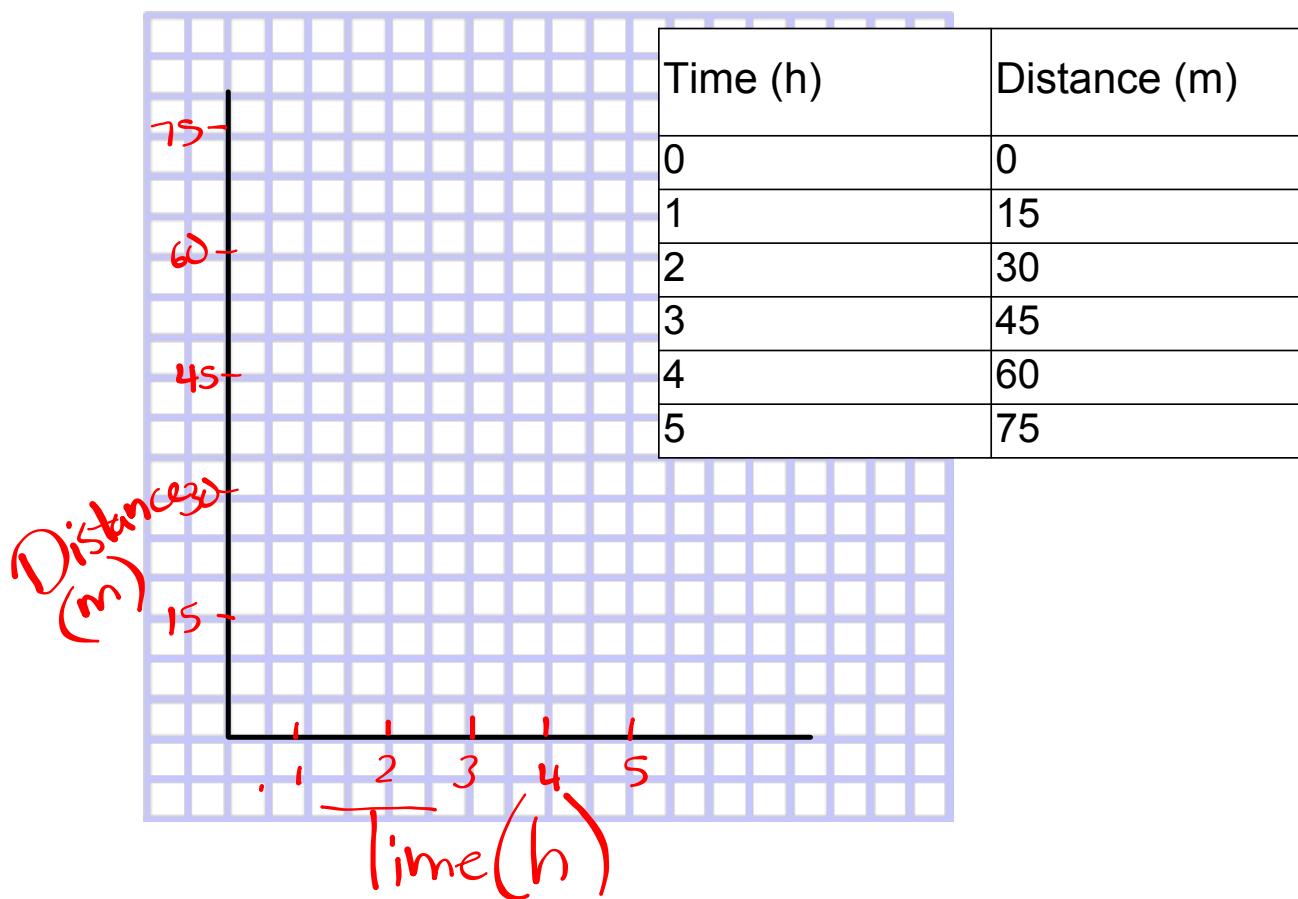
Answer the questions in your exercise books.



1. What is the average speed between a and b?
2. Which line shows the vehicle is stationary?
3. Which line shows the greatest speed?

[Click here
for the
answer](#)

Time (h)	Distance (m)
0	0
1	15
2	30
3	45
4	60
5	75



Attachments

[average speed ex 2 answers.notebook](#)

[average speed ex 1.notebook](#)