



Starter

I travel 100 miles in 2 hours 30 minutes. Calculate the average speed. Include the units:

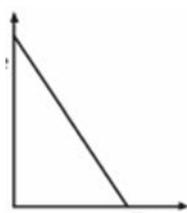
Top Tips!

The steeper the distance time graph, the faster the journey (the speed is higher)

The gradient (slope) of the graph represents the speed.

Learn: $Speed = \frac{Distance}{time}$

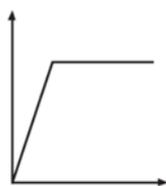
Skills: Label every x axis time and every y axis as the distance from home:



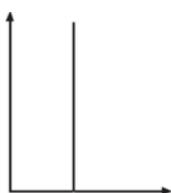
A



B



C



D

Which graphs correspond with the following statements:

Travel away from home and then stop:

Stationary (not moving)

Impossible journey:

Travel home at a constant speed:

Examination Question: 2012 November Linear P1 Higher Qu 3

One day, Aled travels on his bike to the gym. Below is a description of his journey.

08:00	Leaves home
08:15	Stops at a friend's house on the way to the gym
08:36	Leaves his friend's house
09:00	Arrives at the gym
11:00	Leaves the gym
11:30	Arrives home

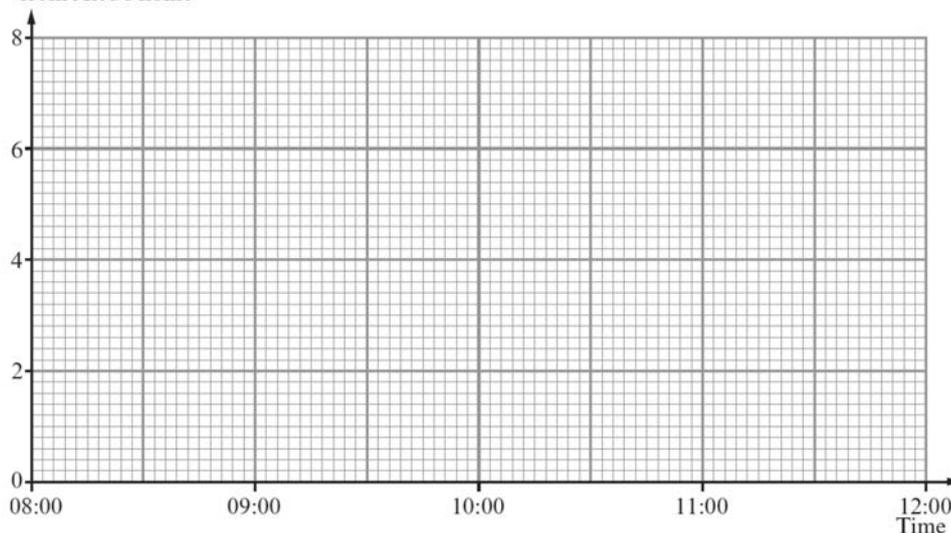
Aled's friend lives on his route to the gym.

Aled lives 2 miles away from his friend.

It is a further 3 miles from Aled's friend's house to the gym.

(a) Use the information about Aled's journey to draw a travel graph on the graph paper below [4]

Distance, in miles, from Aled's home



b) Calculate Aled's average speed, in mph, for his journey home. [2]

Assessment for Learning

Video / QR code



Starter

I travel 100 miles in 2hours 30minutes. Calculate the average speed. Include the units:

$$S = \frac{100}{2.5} = 40 \text{ mph}$$

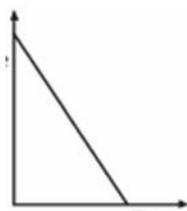
Top Tips!

The steeper the distance time graph, the faster the journey (the speed is higher)

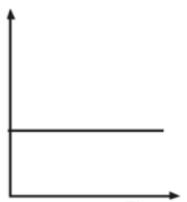
The gradient (slope) of the graph represents the speed.

Learn: $Speed = \frac{Distance}{time}$

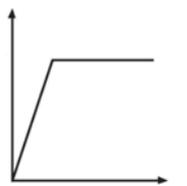
Skills: Label every x axis time and every y axis as the distance from home:



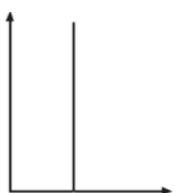
A



B



C



D

Which graphs correspond with the following statements:

Travel away from home and then stop: **C**

Stationary (not moving) **B**

Impossible journey: **D**

Travel home at a constant speed: **A**

Examination Question: 2012 November Linear P1 Higher Qu 3

One day, Aled travels on his bike to the gym. Below is a description of his journey.

08:00	Leaves home
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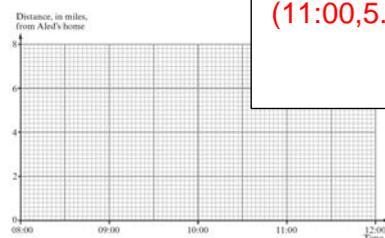
Aled's friend lives on his route to the gym.

Aled lives 2 miles away from his friend.

It is a further 3 miles from Aled's friend's house to the gym.

(b) Use the information about Aled's journey to draw a travel graph on the graph paper below [4]

(08:00, 0) to (08:15, 2.5) joined with a line
 (08:15, 2.5) to (08:36, 2.5) joined with a line AND
 (08:36, 2.5) to (09:00, 5.5) joined with a line
 (09:00, 5.5) to (11:00, 5.5) joined with a line
 (11:00, 5.5) to (11:30, 0) joined with a line



b) Calculate Aled's average speed, in mph, for his journey home. [2]

5.5 / 30 (minutes) or 5.5 / ½ (hour) or 5.5 + 5.5
 11/60(miles/min)
 11 (mph)

Assessment for Learning

Video / QR code

