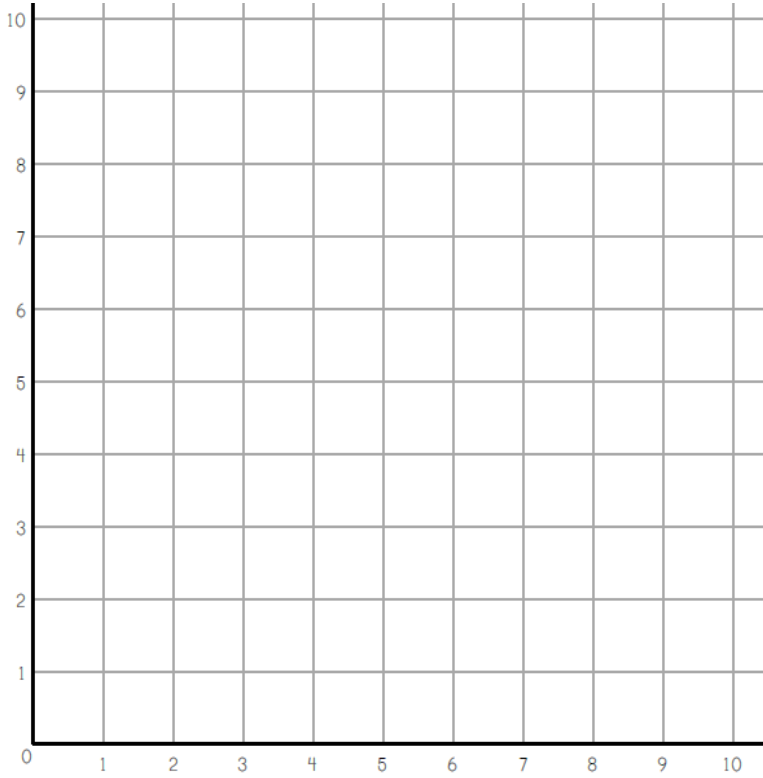


Year 8 Knowledge Organiser – Unit 7 Real life graphs and rate of change

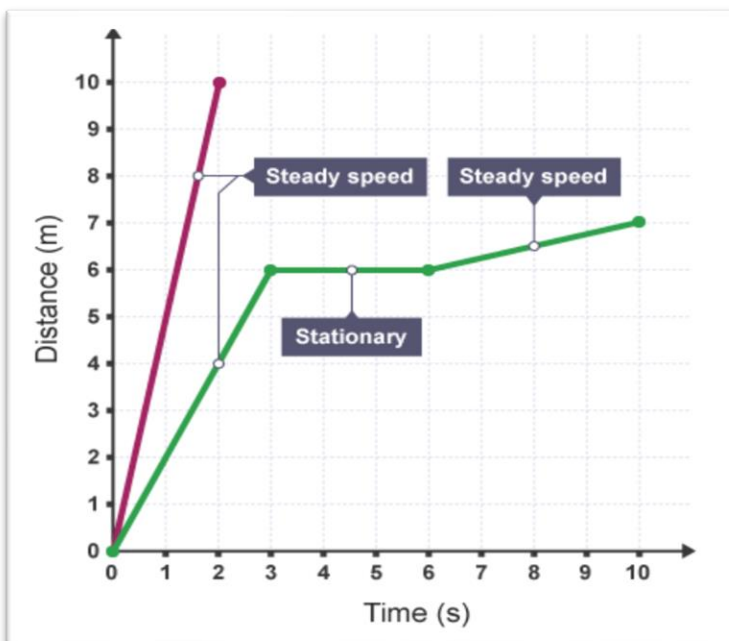
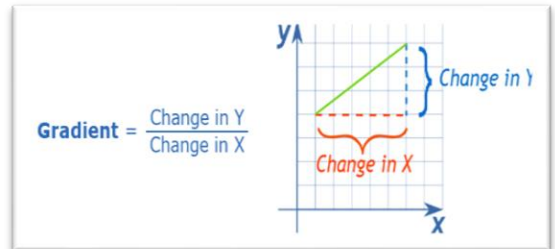
All real-life graphs can be used to estimate or read-off values. The actual meaning of the values will depend on the labels and units shown on each axis.



a) Plot on the graph the cost per hour. Fill in the table below and plot on the graph.

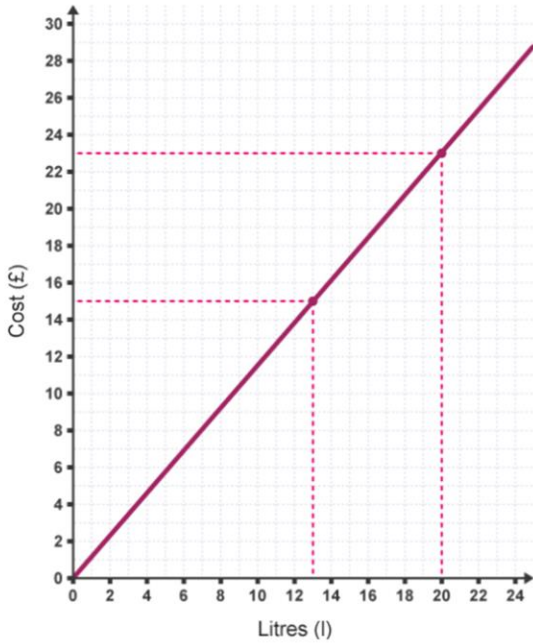
Hours	0	1	2	3		4
Cost (£)	£1	£2	£3			

b) Find the gradient of your line.



Explain the differences in the “steady speeds” in the graph on the left.

This graph shows the cost of petrol. It shows that 20 litres will cost £23 or £15 will buy 13 litres.



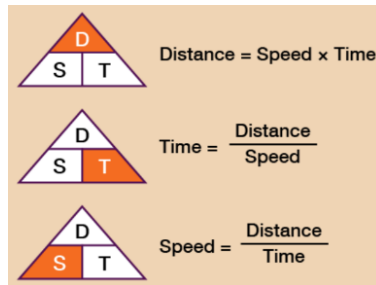
A van is travelling at a constant speed of 40 mph.
How far will the van travel in 2.5 hours?

_____ miles

Write 2.1 hours in hours and minutes.

A bus travels 18 km in 15 minutes.
Calculate the average speed of the bus in km/h.

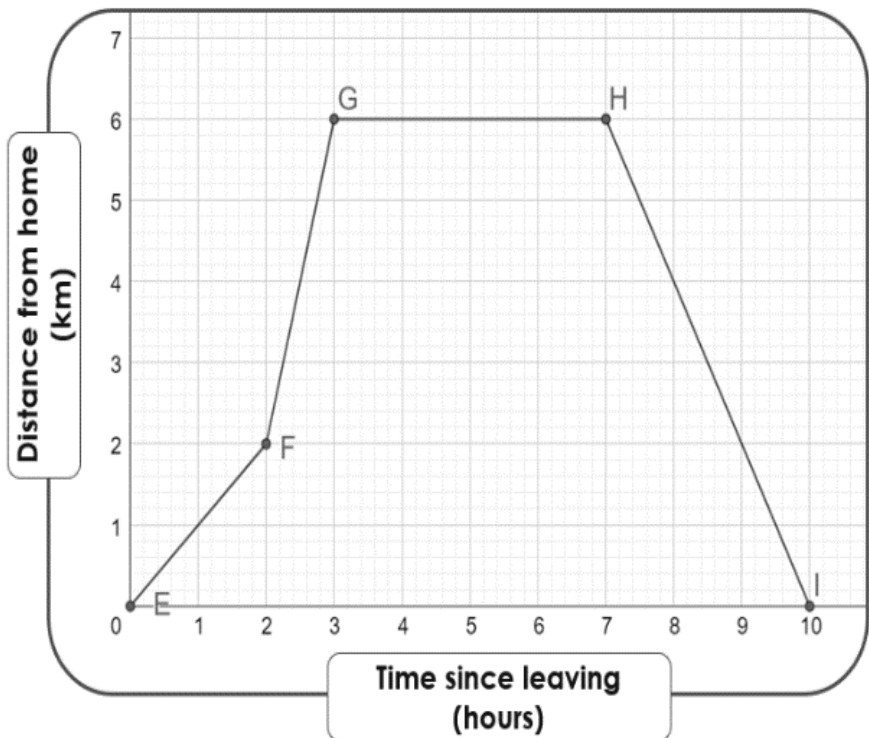
_____ km/h



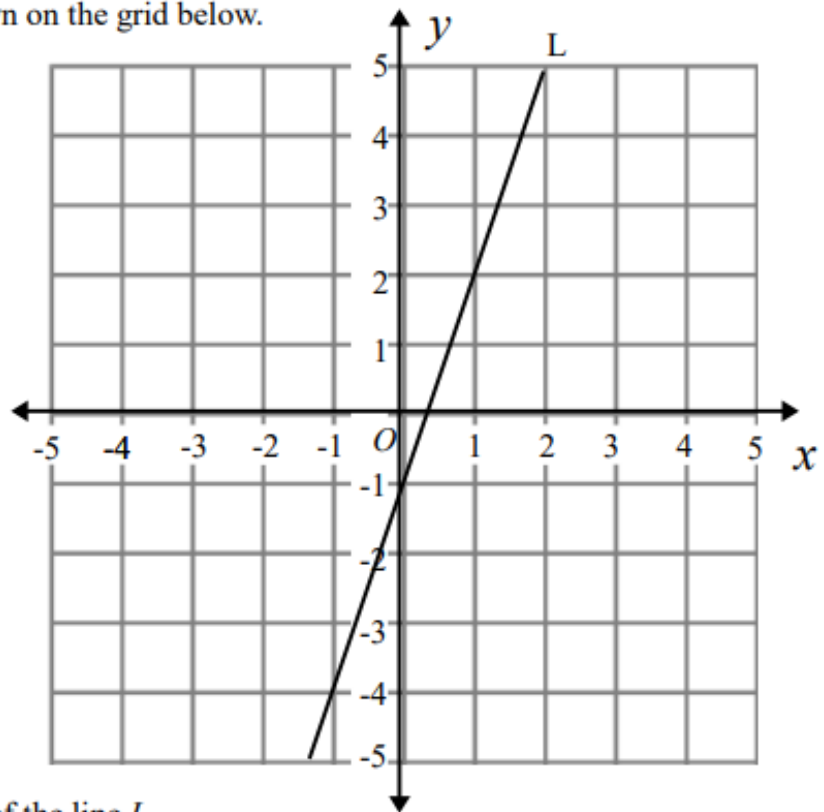
This graph shows Yasmin's distance from home during a 10 hour trip

Match the statement with the line segment

- a) Yasmin stayed the same distance from home
- b) Yasmin returned home
- c) Yasmin moved slowly away from home
- d) Yasmin moved quickly away from home



The line L is drawn on the grid below.



Find the gradient of the line L .

Key learning	Understanding			Hegarty
	R	A	G	
Represent linear relationships graphically				894 895
Interpret real life linear graphs				874 875
Calculate speed				716 717
Interpret rate (Gradients)				896 898 899