Graphs from real situations

Graphs are not just for the Maths class. We use and interpret graphs in many real-life situations and in other school subjects such as Science, Geography and Home Economics.

What is a conversion graph?

A common type of real-life graph is the Conversion graph. Conversion graphs convert one unit of measurement to another. For example, £s to other currencies, degrees Celsius to degrees Fahrenheit, miles to kilometres or gallons to litres. Conversion graphs are always a straight line and often, but not always, go through the point (0,0).

Rewarding Learning

This conversion graph converts fluid ounces to millilitres.

Fluid ounces is an old measure for liquid and is still seen in many recipes.

How many millilitres are equivalent to 10 fluid ounces?

- Find 10 fluid ounces on the horizontal axis.
- Follow the green vertical line until it reaches the graph line.
- Follow the horizontal green line until it reaches the vertical axis.
- Read the number on the vertical axis. It is between 250 and 300
- There are five intervals between 250 and 300 so each interval represents 10 millilitres.

The green line is 3 intervals more than 250, which is 280

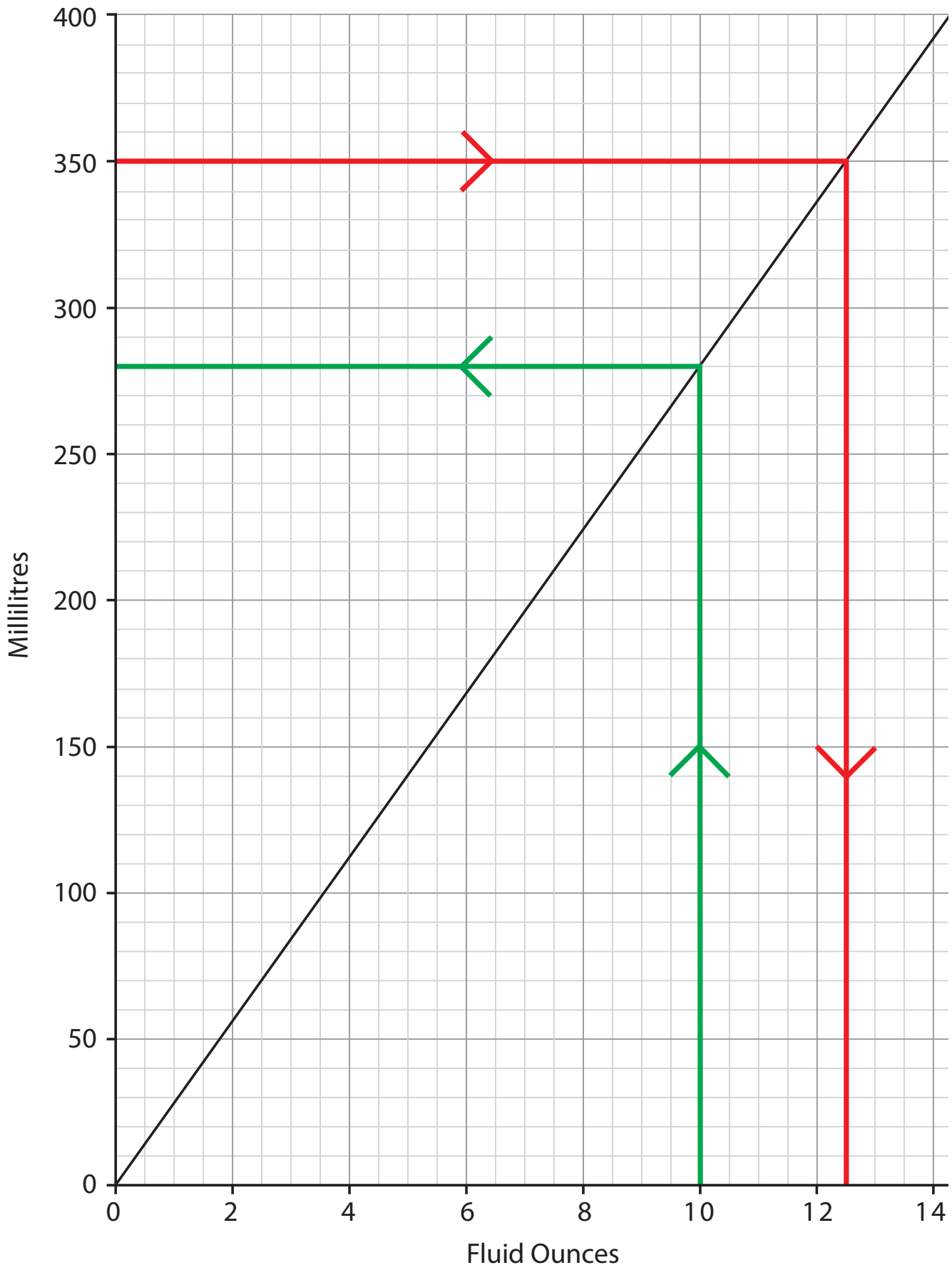
10 fluid ounces is equivalent to 280 millilitres.

How many fluid ounces are equivalent to 350 millilitres?

- Find 350 millilitres on the vertical axis.
- Follow the red horizontal line until it reaches the graph line.
- Follow the red vertical line until it reaches the horizontal axis.
- Read the number on the horizontal axis. It is between 12 and 14
- There are four intervals between 12 and 14 so each interval represents ½ or 0.5 fluid ounces.

The red line is one interval more than 12 which is 12.5

350 millilitres is equivalent to 12.5 fluid ounces.



Level 6

Use and interpret graphs from real situations.

Graphs from real situations

Graphs are not just for the Maths class. We use and interpret graphs in many real-life situations and in other school subjects such as Science, Geography and Home Economics.

Other types of real-life graphs

Other types of real-life graphs include graphs that can be used in practical situations such as showing profits in business and costs for services. These graphs can be used to display and interpret information, and can also act as a calculator.

Rewarding Learning

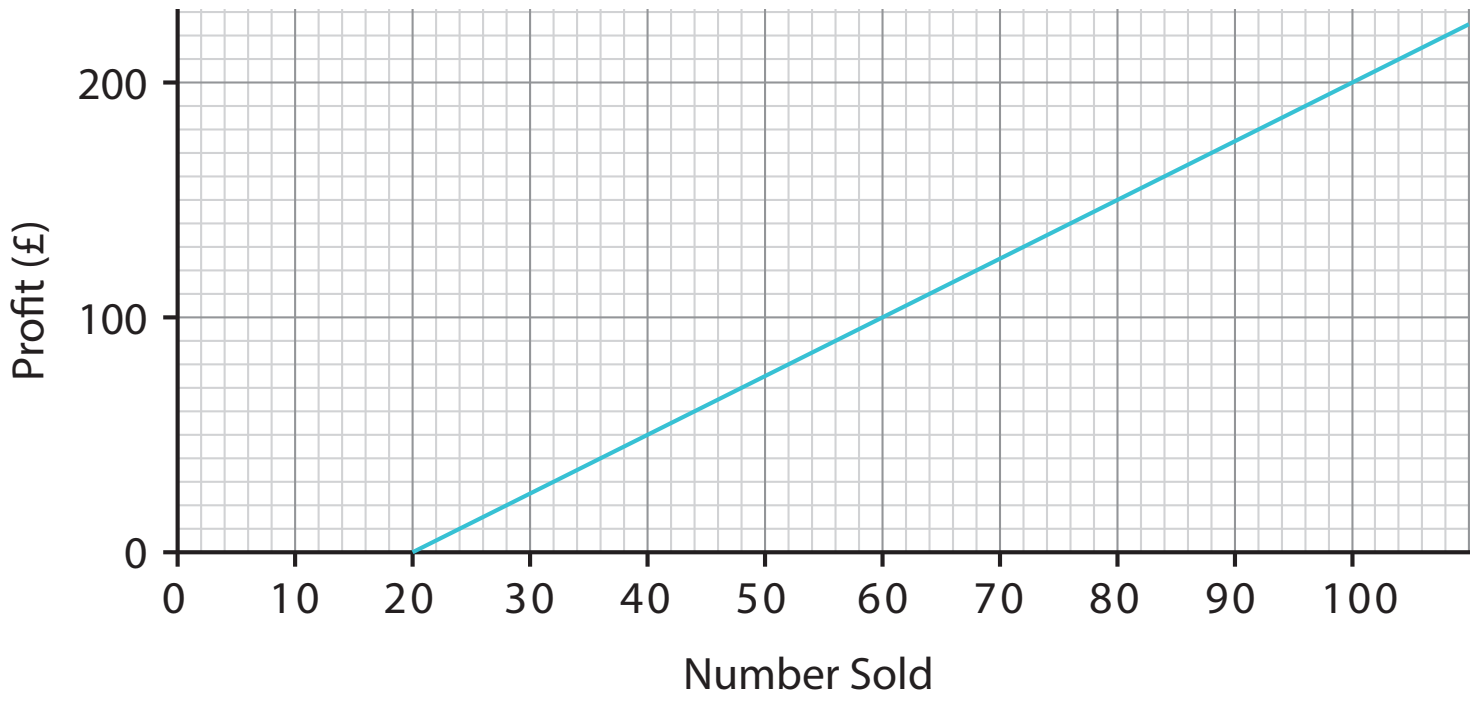
Graphs from real life – examples

Profit made on soft toys

This graph shows the profit made on making and selling soft toys.

The line starts at 20 on the horizontal axis and this shows that you have to sell more than 20 toys to start making a profit.

After that, the profit increases at a steady rate.



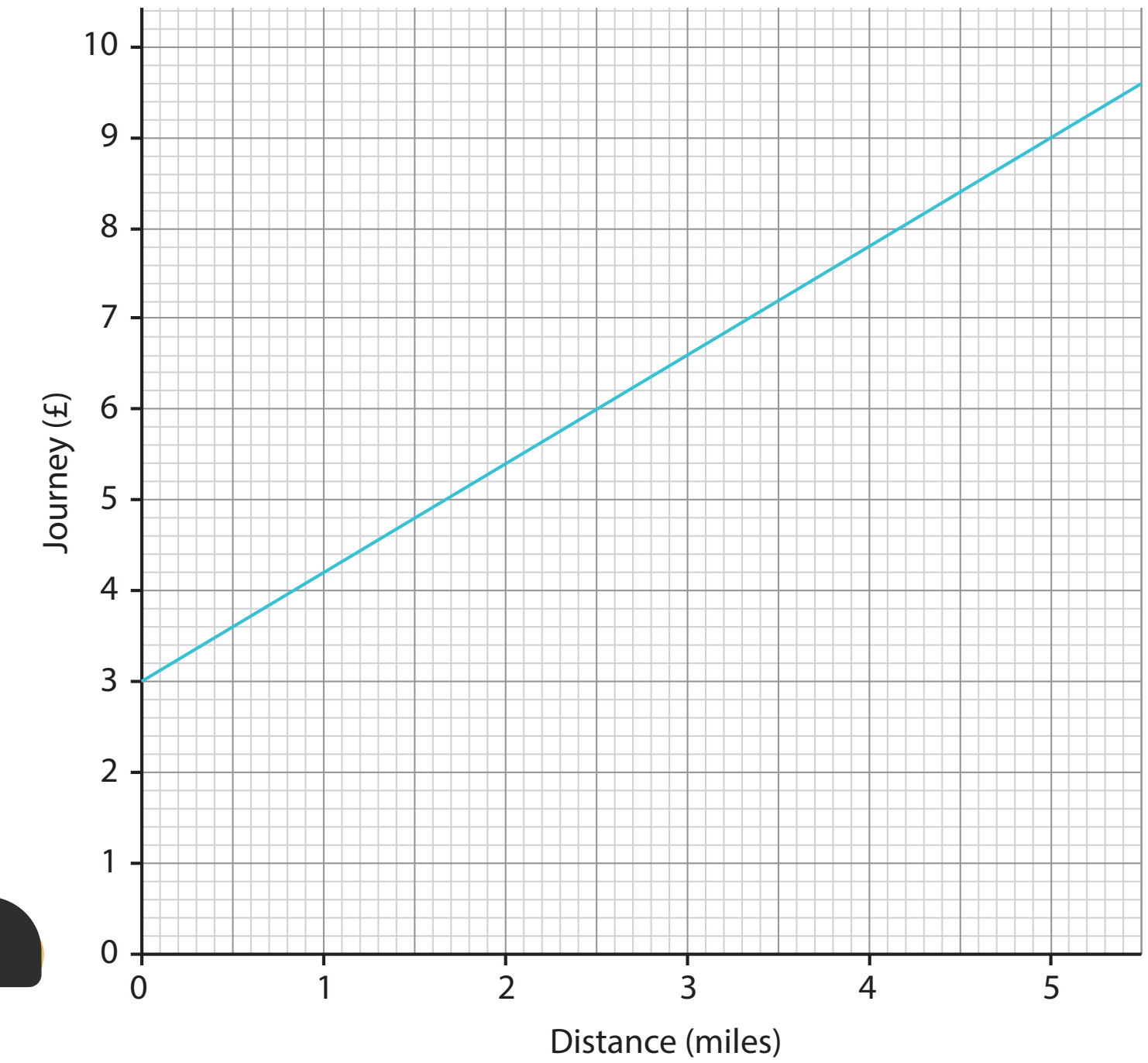
Taxi journey fares

A taxi company calculates its fares based on a fixed call charge plus the distance of the journey taken.

This graph shows the fare you would pay depending on how far you travel.

The line starts at £3 on the vertical axis because this is the fixed call out charge.

There is a fixed rate of £1.20 per mile on top of that for any journey travelled.



Level 6

Use and interpret graphs from real situations.

Graphs from real situations

Graphs are not just for the Maths class. We use and interpret graphs in many real-life situations and in other school subjects such as Science, Geography and Home Economics.

What is a distance-time graph?

A distance–time graph is a real-life graph with time on the horizontal axis and distance on the vertical axis. It shows the relevant information of a journey taken by a person or an object. The speed of the person or object can also be worked out from the graph.

Rewarding Learning

What is a distance–time graph?

A distance–time graph is a graph with time on the horizontal axis and distance on the vertical axis. It shows all the relevant information of a journey taken by a person or an object.

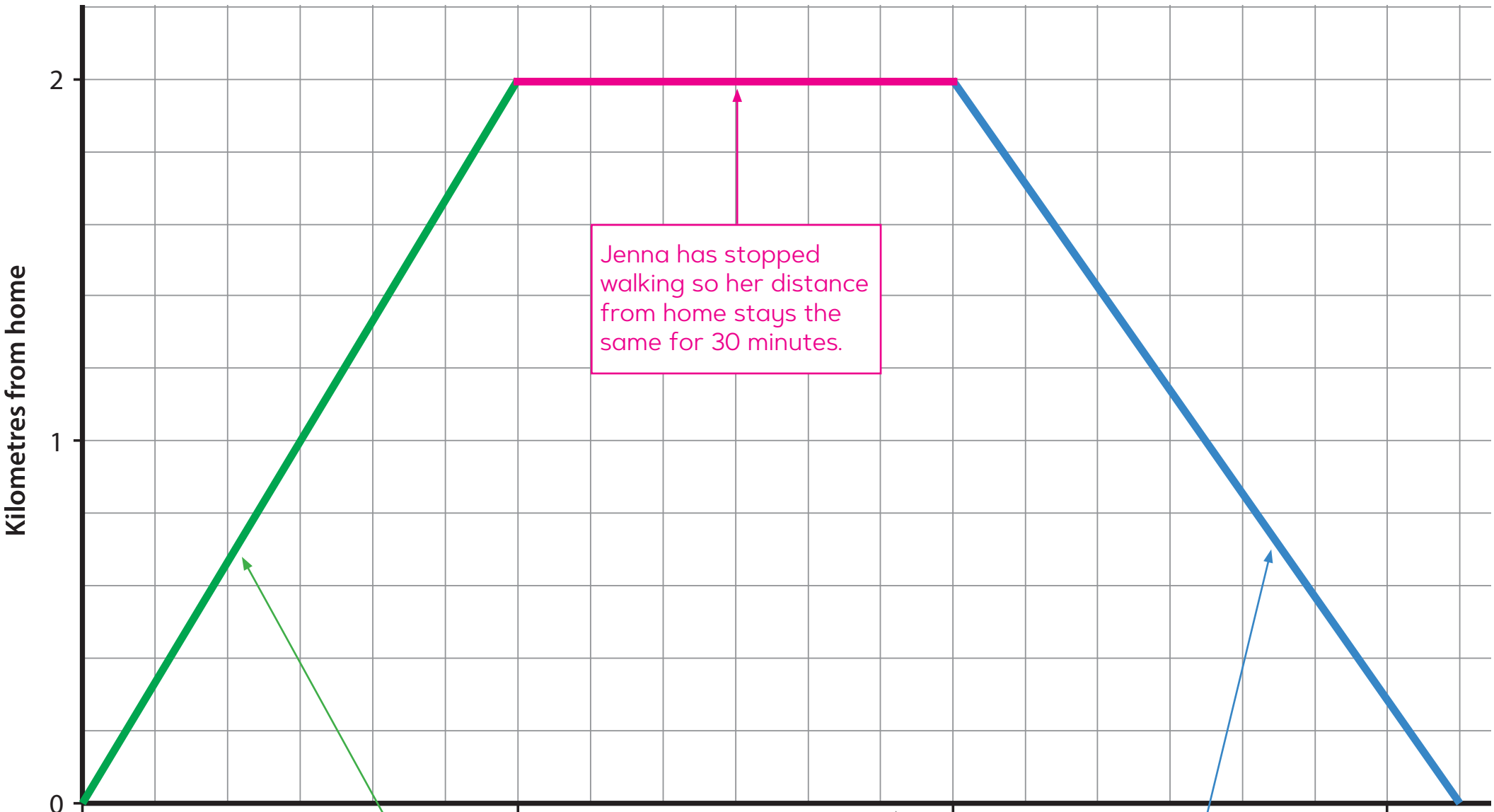
How to interpret a distance–time graph

The graph of Jenna's journey is made up of 3 parts.

1 **Jenna walks from home to her friend's house.**

2 **Jenna stays for 30 minutes.**

3 **Jenna walks home again.**



Level 6

Use and interpret graphs from real situations.