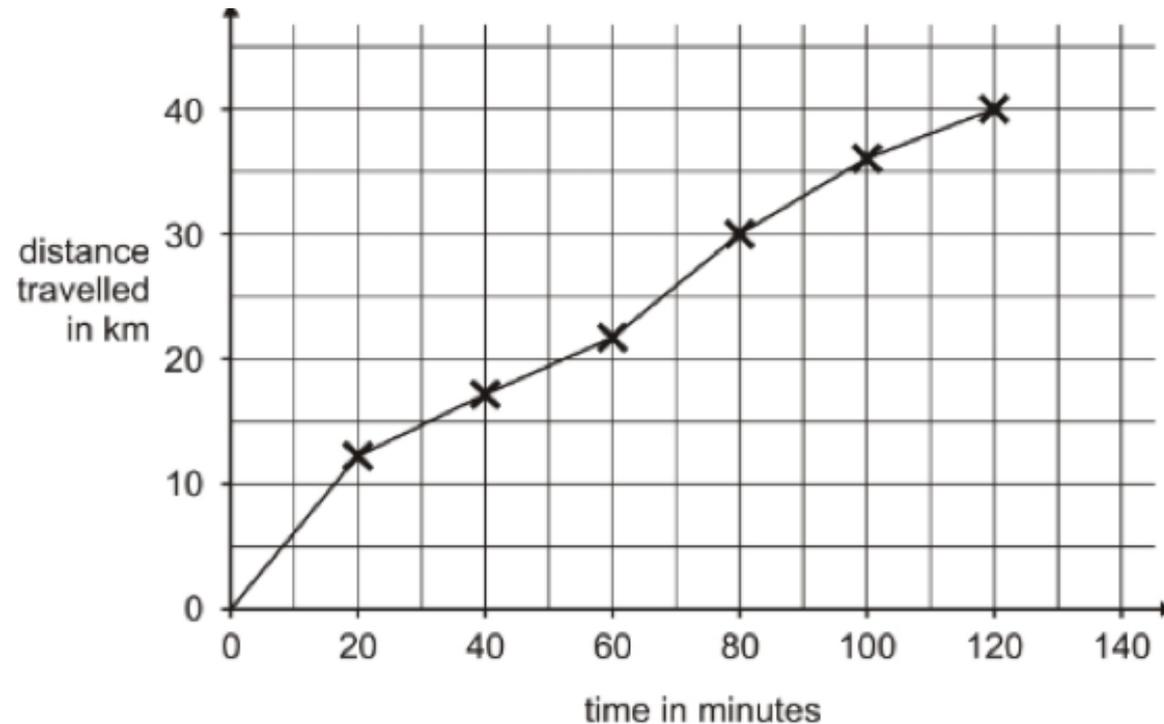


RECALL



Carol went on a 40-kilometre cycle ride.

This is the graph of how far she had gone at different times.

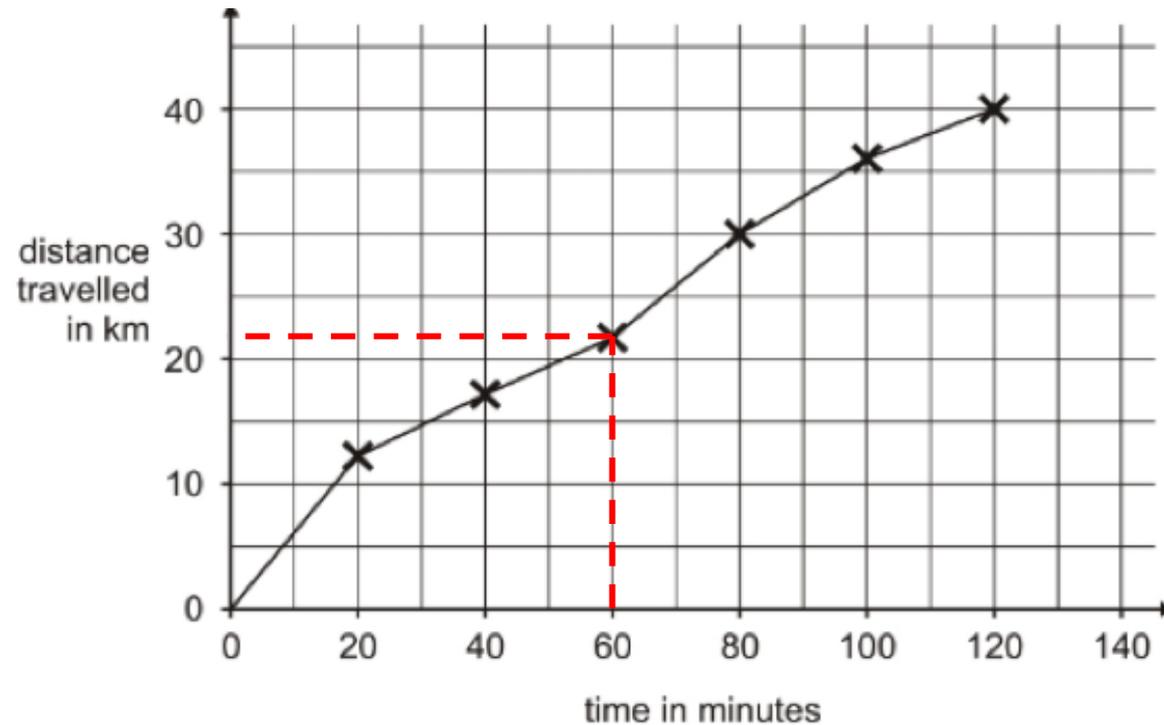
- 1) How many minutes did Carol take to travel the last 10 kilometres of the ride?
- 2) Use the graph to estimate the distance travelled in the first 20 minutes of the ride.
- 3) Carol says, "I travelled further in the first hour than in the second hour."

Explain how the graph shows this.



Create your own question about this graph

RECALL ANSWERS



Carol went on a 40-kilometre cycle ride.

This is the graph of how far she had gone at different times.

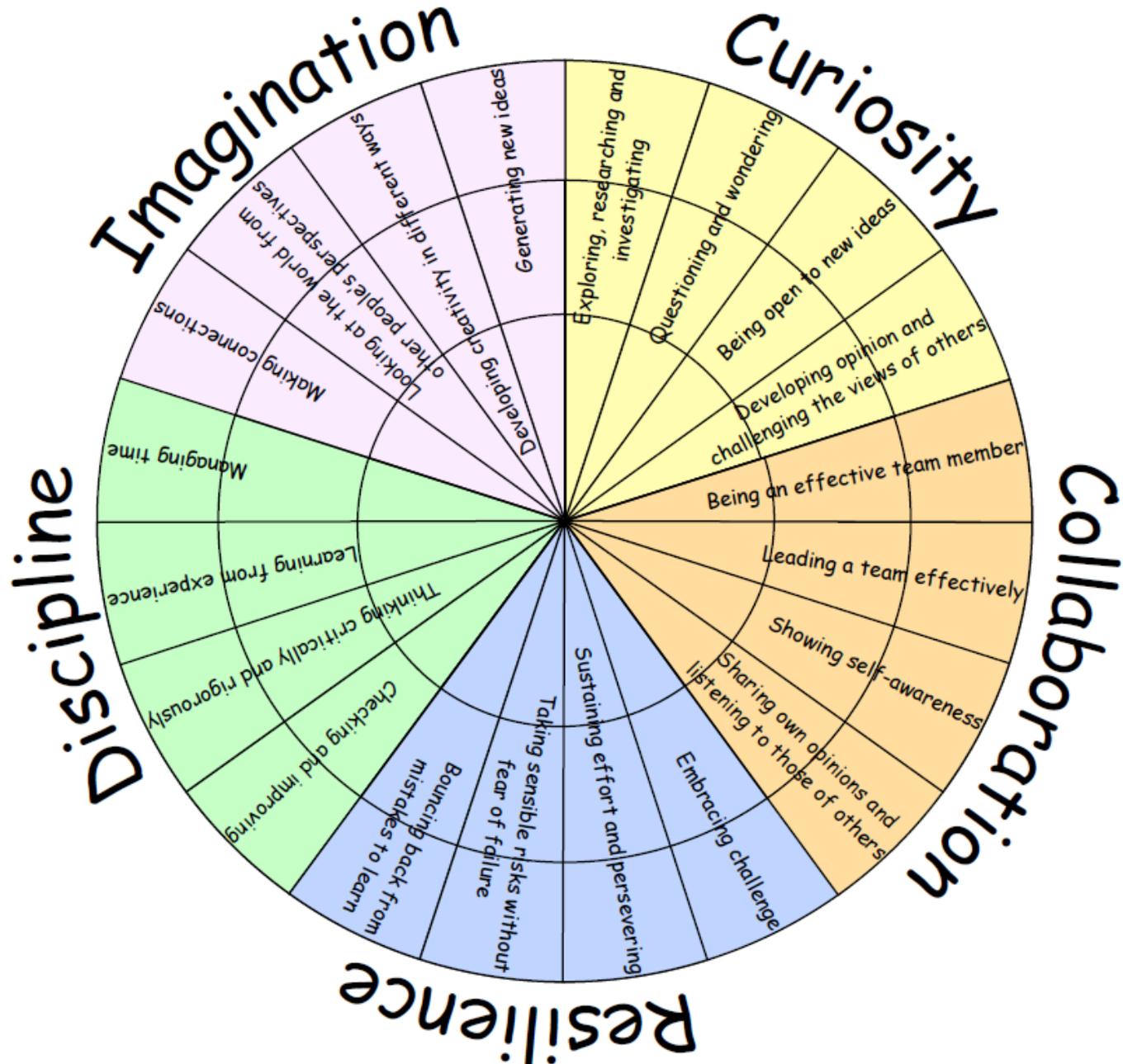
- 1) How many minutes did Carol take to travel the last 10 kilometres of the ride? **40 minutes**
- 2) Use the graph to estimate the distance travelled in the first 20 minutes of the ride. **12.5km**
- 3) Carol says, "I travelled further in the first hour than in the second hour."
In the first 60 minutes she travels 22km and in the second 60 minutes she travelled 18km.



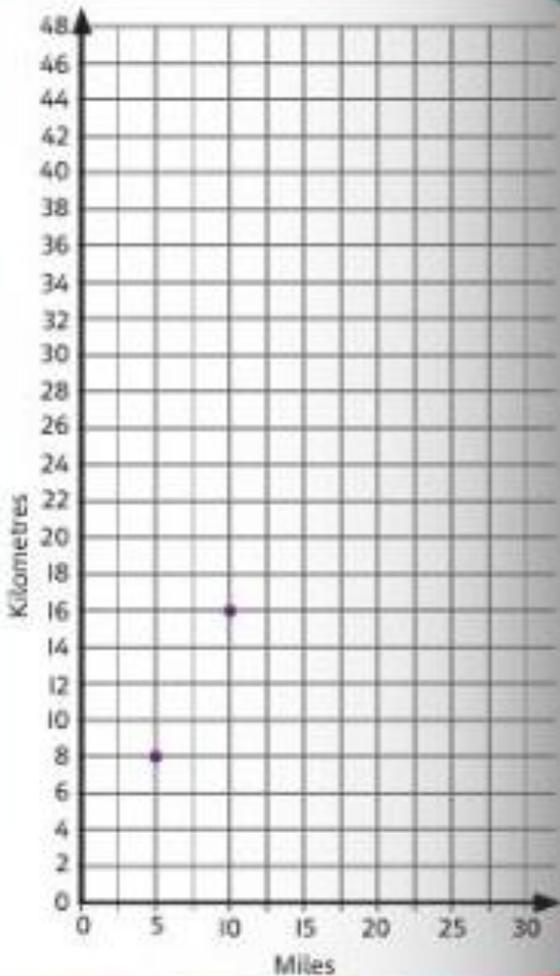
Create your own question about this graph

I CAN SOLVE PROBLEMS USING
THE DATA FROM LINE GRAPHS
AND PIE CHARTS
statistics (32ii)

LEARNING HABITS?



GUIDED PRACTICE



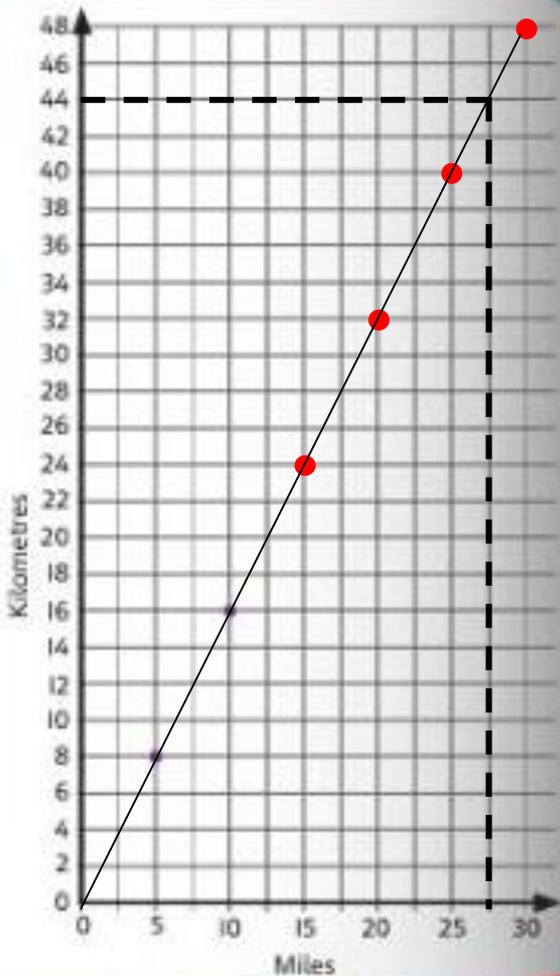
Miles and kilometres conversion table

Miles	Kilometres
5 miles	8 km
10 miles	16 km
15 miles	24 km
20 miles	?
25 miles	?

1a) Show where the next points would go on the graph and complete the missing values in the table.

b) How many miles convert to 44km?

GUIDED PRACTICE ANSWERS



Miles and kilometres conversion table

Miles	Kilometres
5 miles	8 km
10 miles	16 km
15 miles	24 km
20 miles	?
25 miles	?

1a) Show where the next points would go on the graph and complete the missing values in the table.

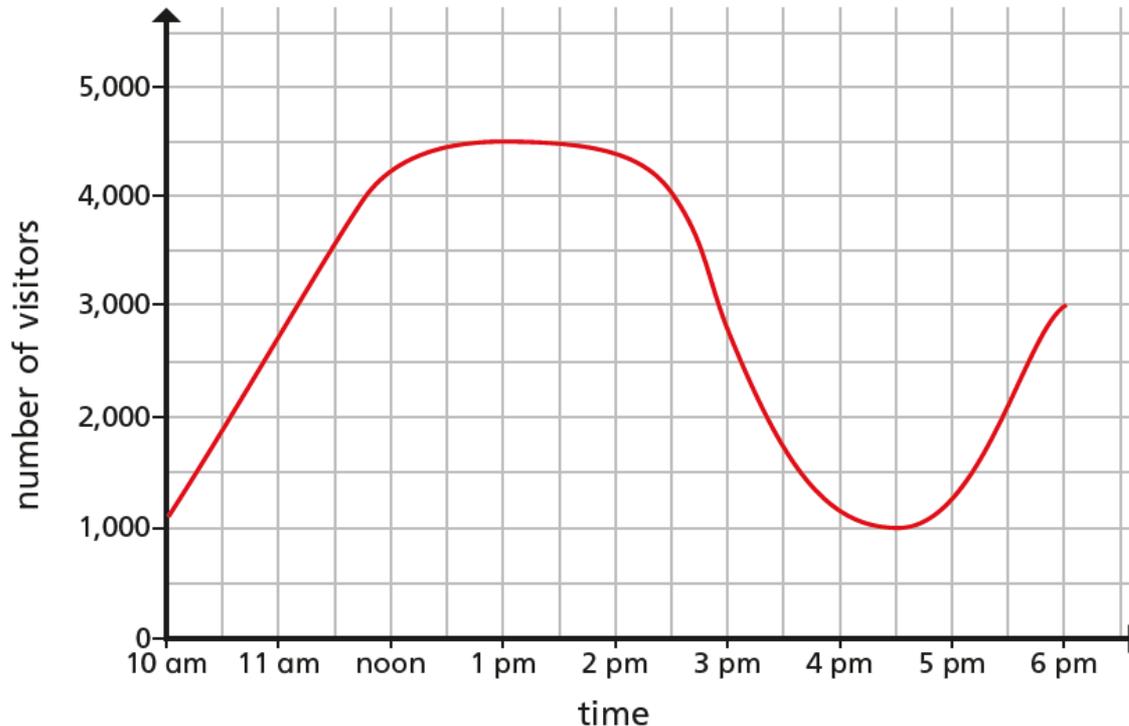
b) How many miles convert to 44km? **27.5 miles**

INTELLIGENT PRACTICE



DIVE DEEPER 1

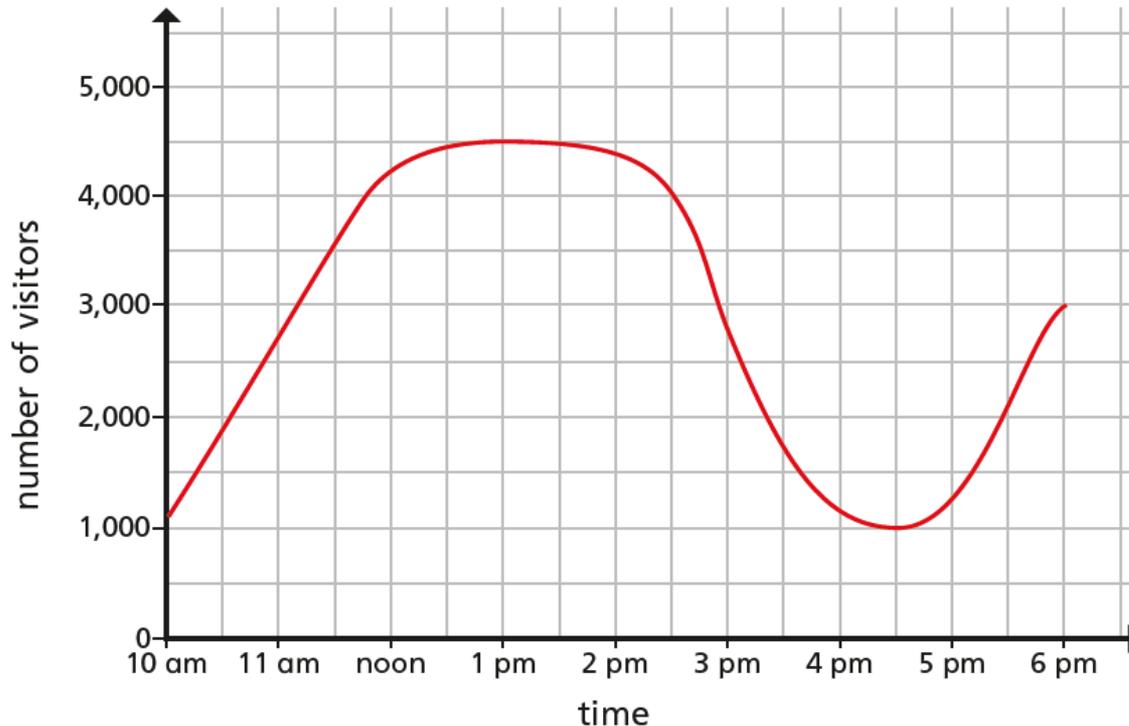
1) The graph shows the number of visitors to a shopping centre during one day.



- At what time was the greatest number of visitors at the shopping centre?
- What was the difference between the number of visitors at noon and 3 pm?
- For how long were there 4,000 or more visitors at the shopping centre?
- Approximately how many visitors were at the shopping centre at 2 pm?

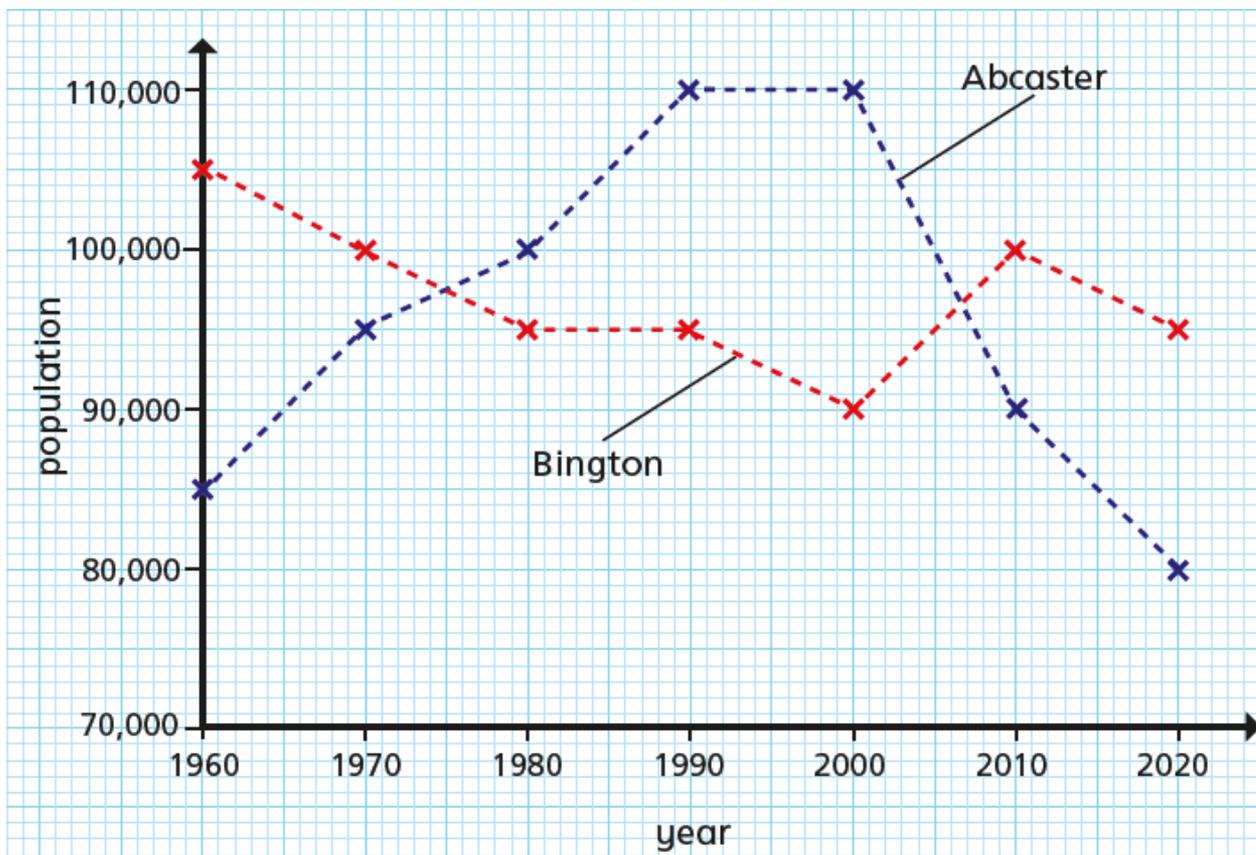
DIVE DEEPER 1 ANSWERS

1) The graph shows the number of visitors to a shopping centre during one day.



- At what time was the greatest number of visitors at the shopping centre? **1pm**
- What was the difference between the number of visitors at noon and 3pm? **1500**
- For how long were there 4,000 or more visitors at the shopping centre? **2 hours and 45 minutes**
- Approximately how many visitors were at the shopping centre at 2pm? **4300 - 4400**

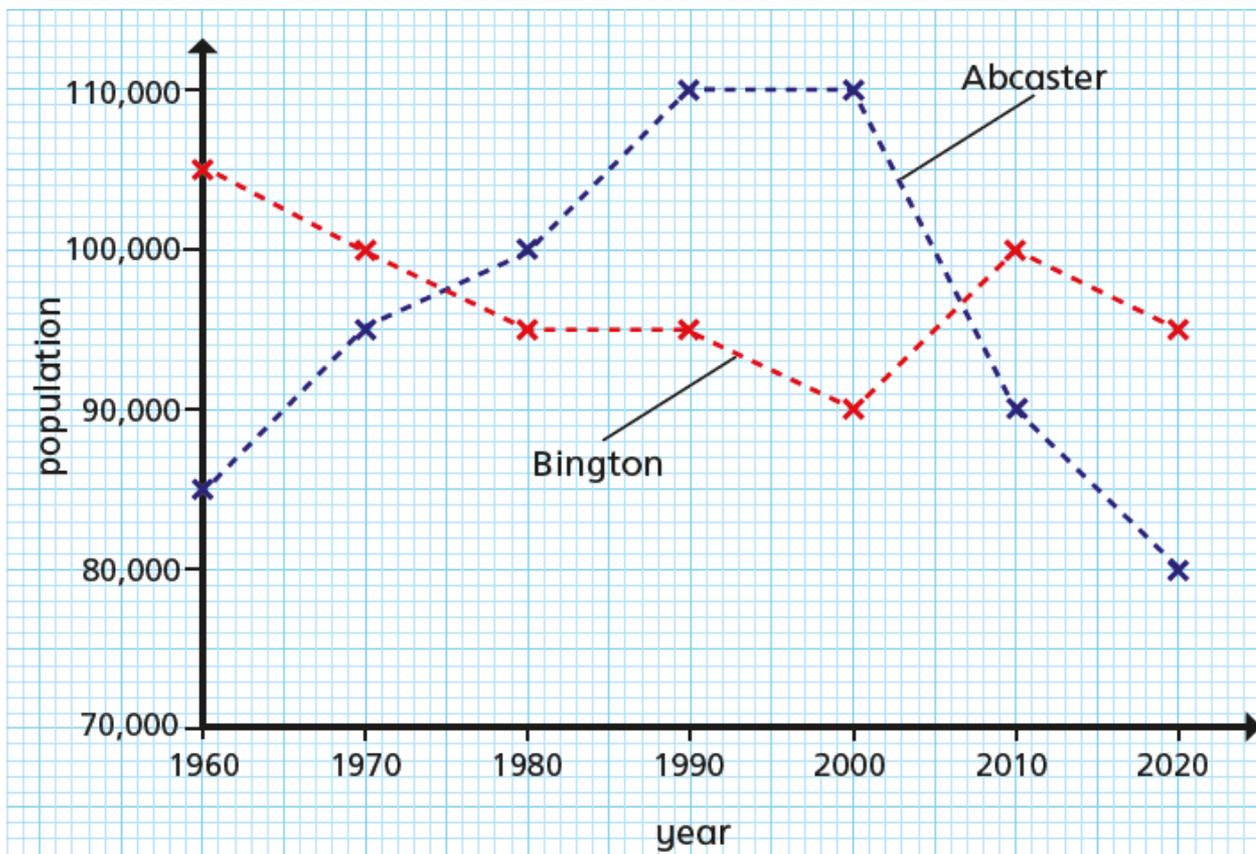
DIVE DEEPER 2



The graph compares the populations of two towns between 1960 and 2020.

- How often was the population recorded?
- Which town had the greater population in 1974?
- Estimate the two years in which the populations were the same in both towns.
- In which years was the difference between the populations greatest?

DIVE DEEPER 2 ANSWERS



The graph compares the populations of two towns between 1960 and 2020.

- How often was the population recorded? **Every 10 years**
- Which town had the greater population in 1974? **Bington**
- Estimate the two years in which the populations were the same in both towns. **1975 & 2007**
- In which years was the difference between the populations greatest? **1960 & 2000**

DIVE DEEPER 3A

3) The graph shows the conversion between miles and kilometres.

- How many kilometres are there in 45 miles?
- How many miles are there in 128 kilometres?
- Mo and Eva want to know how far 240 miles is in kilometres.



Eva

I'm going to convert 60 miles to kilometres and multiply my answer by 4



Mo

I'm going to convert 80 miles to kilometres and multiply my answer by 3

Who is correct?

Explain why.

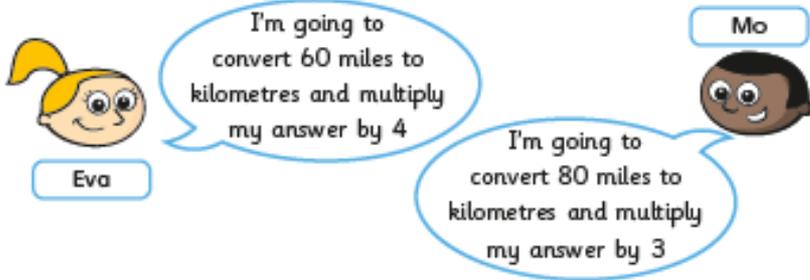
Convert 240 miles to kilometres.



DIVE DEEPER 3A ANS

3) The graph shows the conversion between miles and kilometres.

- a) How many kilometres are there in 45 miles? **71 km**
- b) How many miles are there in 128 kilometres? **80 miles**
- c) Mo and Eva want to know how far 240 miles is in kilometres.



Who is correct? **Both**
60 and 4 & 80 and 3 are both factor pairs of 240

240 miles = 384 km



DIVE DEEPER 3B

d) A coach driver can drive a maximum of 400 miles in one day.

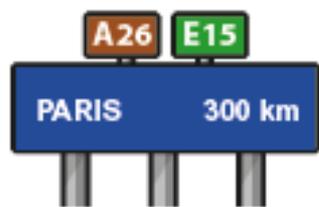
A coach driver is driving from Birmingham to Paris.

He gets the ferry from Dover in England to Calais in France.

In Dover he sees a sign.

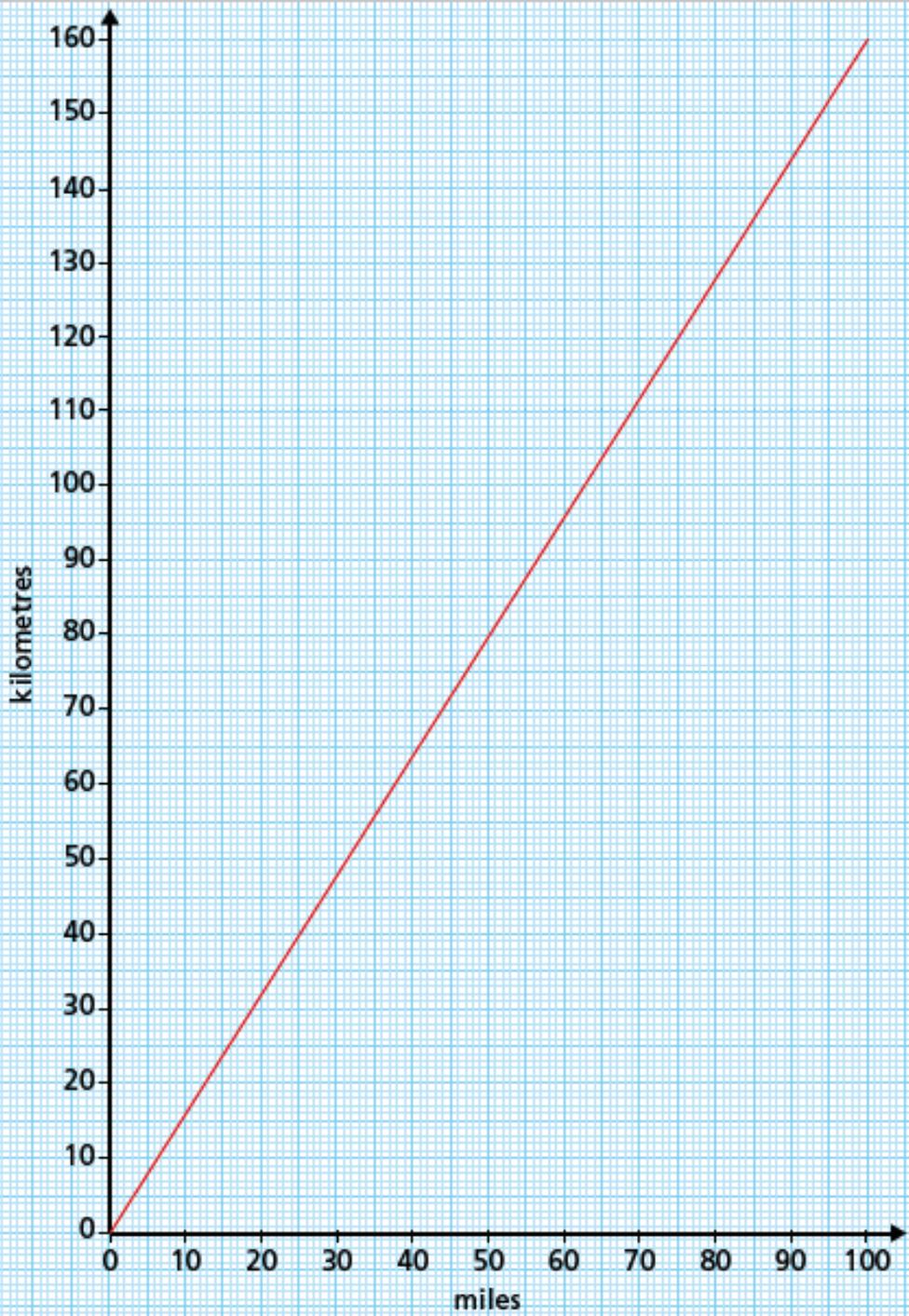


In Calais he sees a sign.



Is the coach driver allowed to drive from Birmingham to Paris in one day?

Explain your answer



DIVE DEEPER 3B ANS

d) A coach driver can drive a maximum of 400 miles in one day.

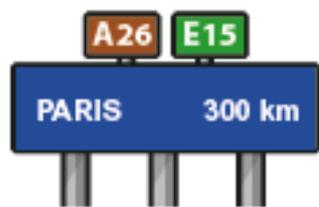
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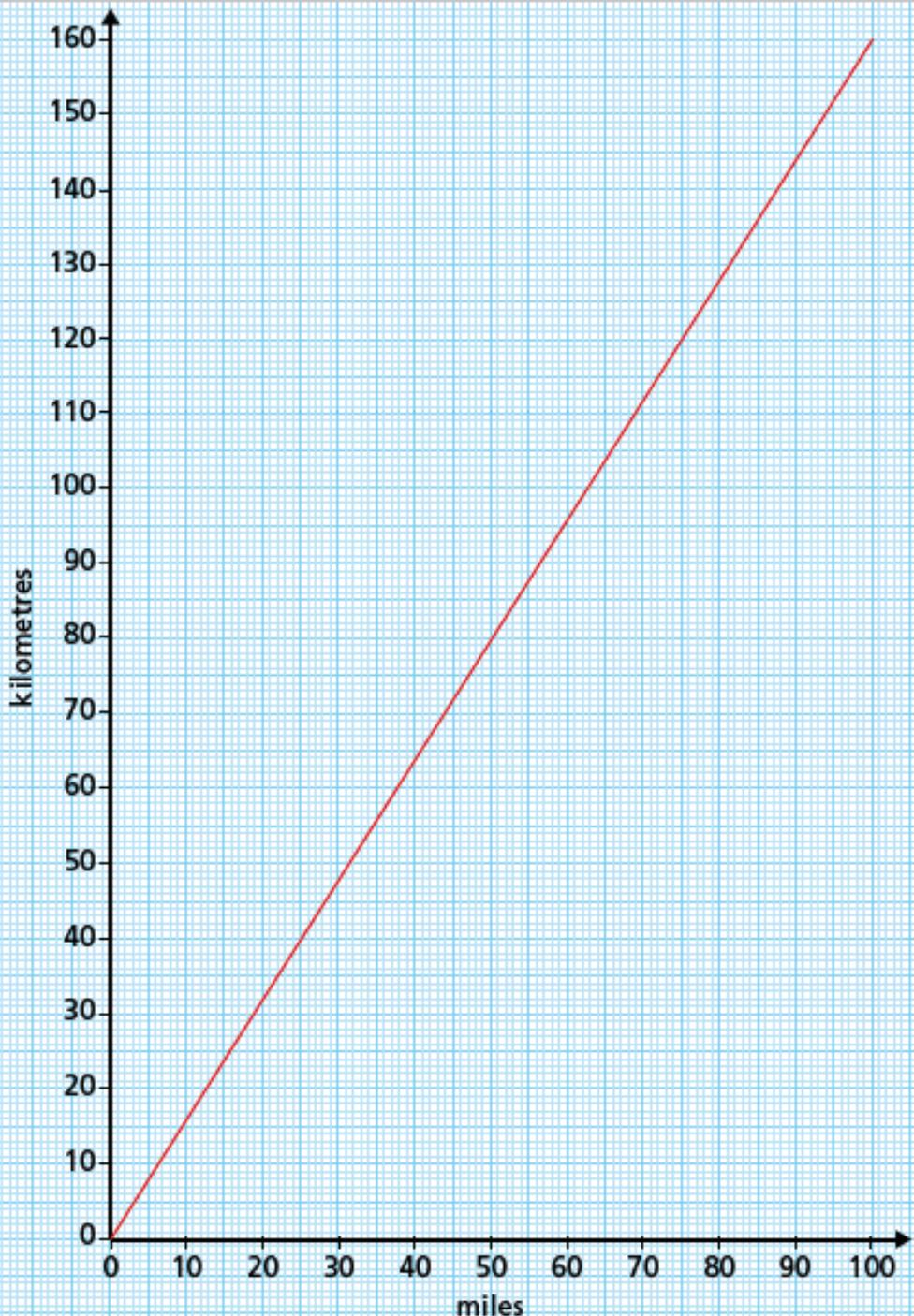


Is the coach driver allowed to drive from Birmingham to Paris in one day? **Yes**

$$300\text{km} = 186 \text{ miles}$$

$$186 \text{ miles} + 200 \text{ miles} = 386 \text{ miles}$$

$$386 \text{ miles} < 400 \text{ miles}$$



SELF-ASSESSMENT

- Some will even be able use reasoning and wider knowledge to answer questions using graphs
 - Some will be able to use graphs to find differences and similarities in multiple data entries
 - Most will be able to read graphs accurately
 - All will be able to complete graphs to find answers
- 