

Name

Class

# MATHS TEACHER HUB

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## Line graphs

### (9 – 1) Topic booklet

These questions have been collated from previous years GCSE Mathematics papers.

**You must have:** Ruler graduated in centimetres and millimetres, protractor, pair of compasses, pen, HB pencil, eraser.

Total Marks

### Instructions

- Use **black** ink or ball-point pen.
- Fill in the boxes** at the top of this page with your name, centre number and candidate number.
- Answer **all** questions.
- Answer the questions in the spaces provided  
– *there may be more space than you need.*
- Diagrams are NOT accurately drawn, unless otherwise indicated.
- You must **show all your working out.**
- If the question is a **1F** question you are not allowed to use a calculator.
- If the question is a **2F** or a **3F** question, you may use a calculator to help you answer.

### Information

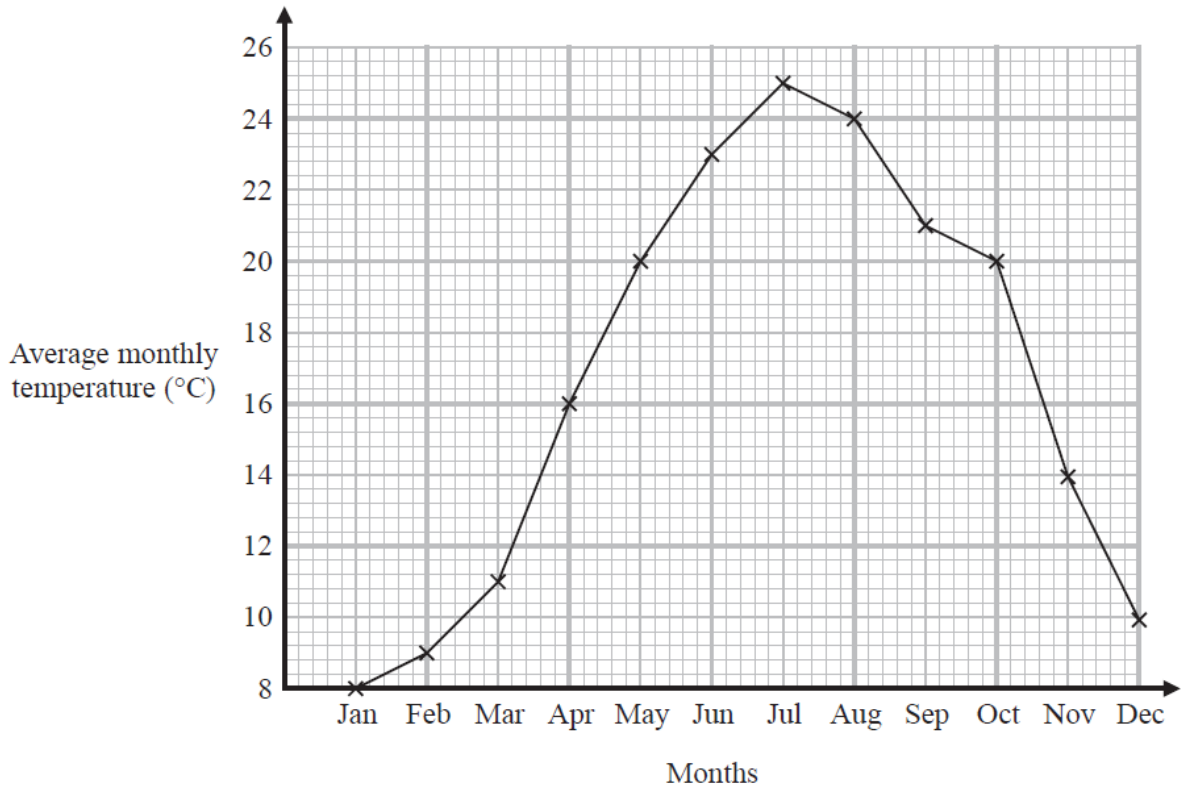
- The marks for **each** question are shown in brackets  
– *use this as a guide as to how much time to spend on each question.*

### Advice

- Read each question carefully before you start to answer it.
- Keep an eye on the time.
- Try to answer every question.
- Check your answers if you have time at the end.

**Answer ALL questions**  
**Write your answers in the space provided.**  
**You must write down all the stages in your working.**

6 The graph shows information about the average monthly temperature, in  $^{\circ}\text{C}$ , in Amman.



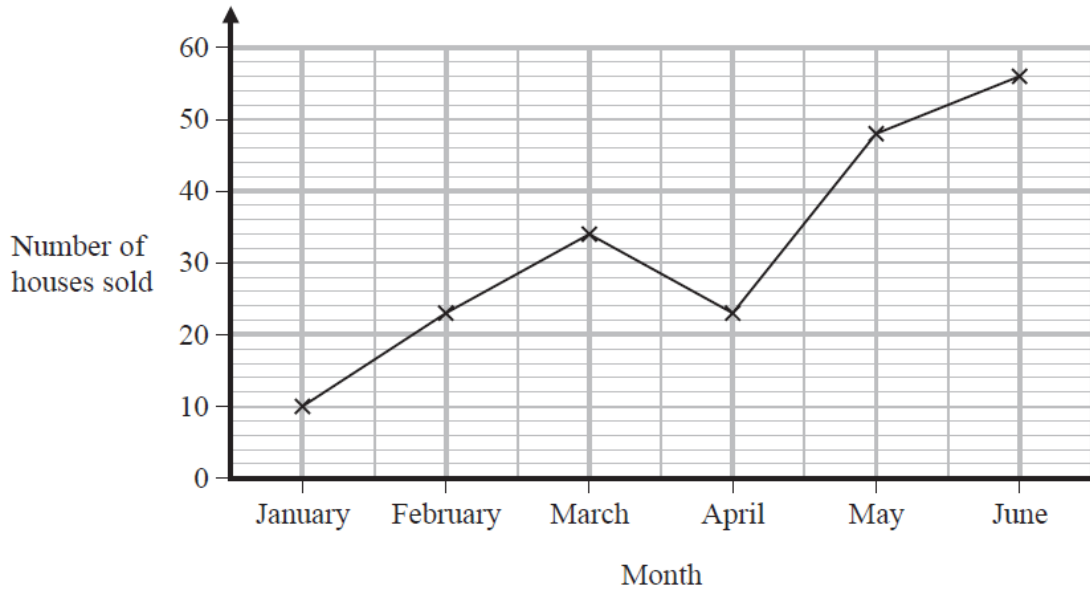
(a) For how many months was the average monthly temperature greater than  $16^{\circ}\text{C}$ ?

.....  
(1)

(b) Write down the two months that had the same average monthly temperature.

..... and .....  
(1)

- 9 The graph shows information about the number of houses sold by an estate agent in each of six months last year.



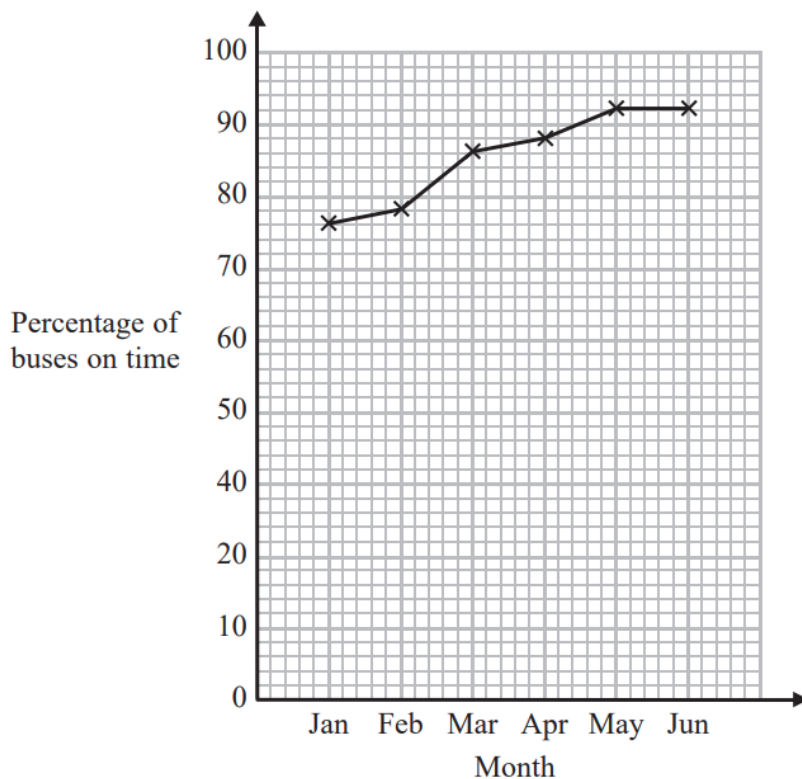
- (a) How many houses were sold by the estate agent in February?

.....  
(1)

- (b) For this estate agent, write down the ratio of the number of houses sold in January to the number of houses sold in June.

.....  
(2)

8 Chrissy drew this graph to show the percentage of buses that got to a bus stop on time for six months.



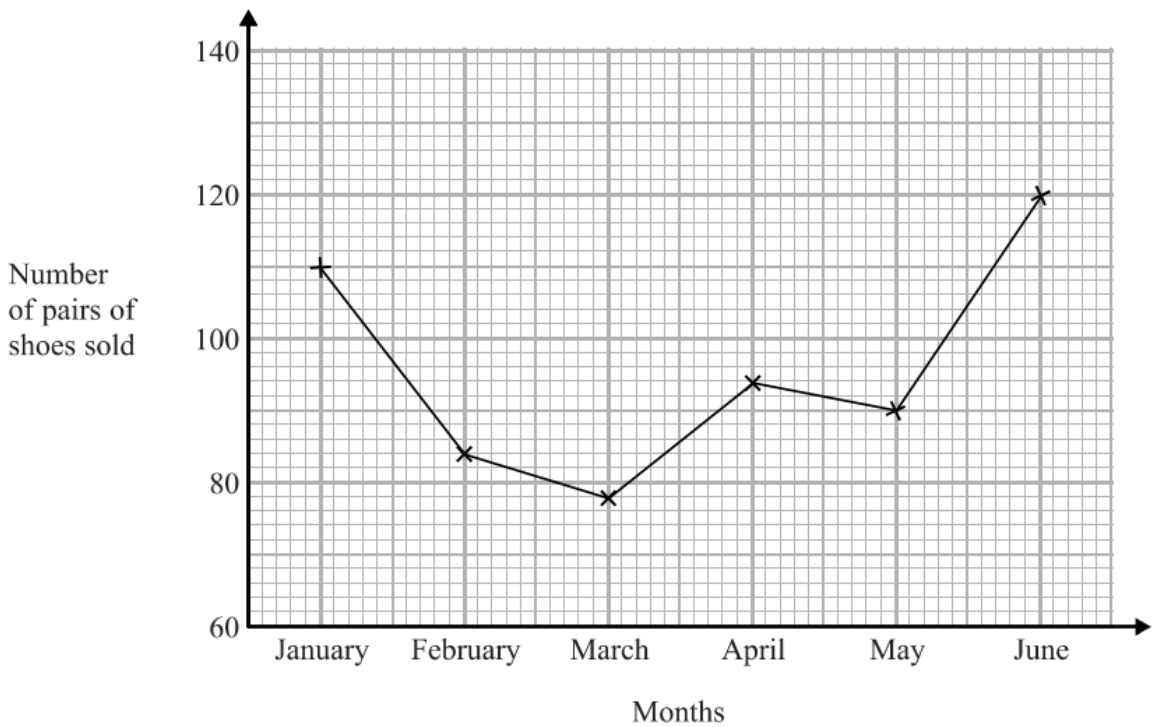
(a) Write down **one** thing that is wrong with the graph.

.....  
.....  
(1)

(b) Describe the trend in the percentage of buses that got to the bus stop on time.

.....  
(1)

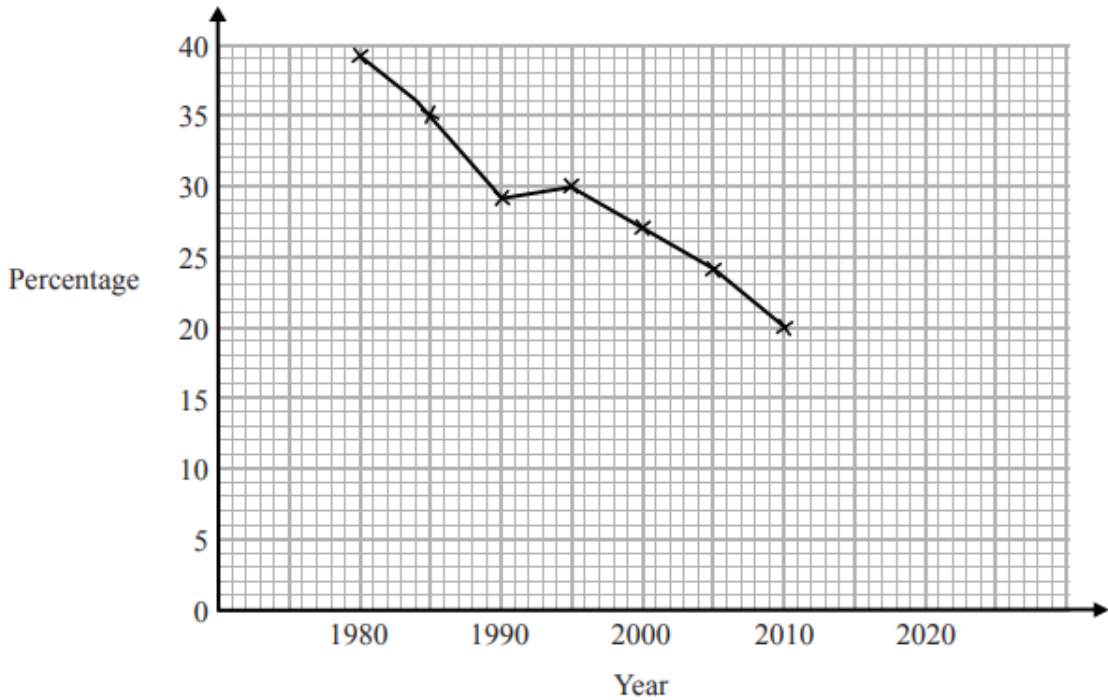
- 22 The time-series graph gives some information about the number of pairs of shoes sold in a shoe shop in the first six months of 2014



The sales target for the first six months of 2014 was to sell a mean of 96 pairs of shoes per month.

Did the shoe shop meet this sales target?  
You must show how you get your answer.

23 The time series graph shows information about the percentages of the people in a village that used the village shop for the years between 1980 and 2010



(a) Describe the trend in the percentage of the people in the village who used the shop for this period.

(1)

(b) (i) Use the graph to predict the percentage of the people in the village likely to use the shop in the year 2020

.....%

(ii) Is your prediction reliable?  
Explain your answer.

(3)