Line Graph - Worksheet

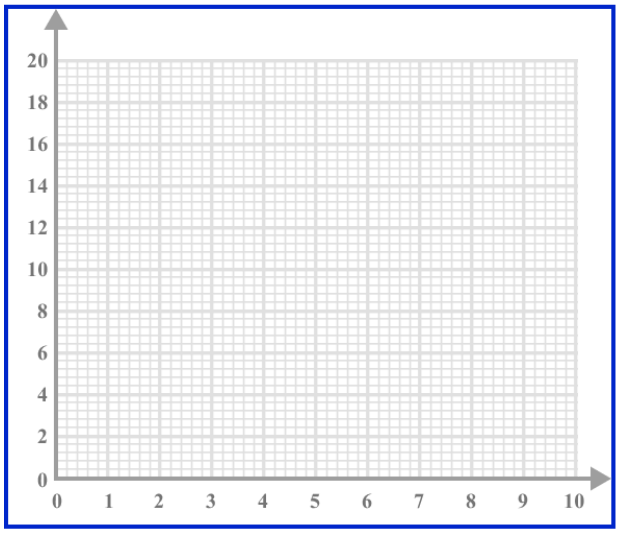
Skill

Group A - Drawing line graphs

For each of the following use the templates provided to draw the line graphs

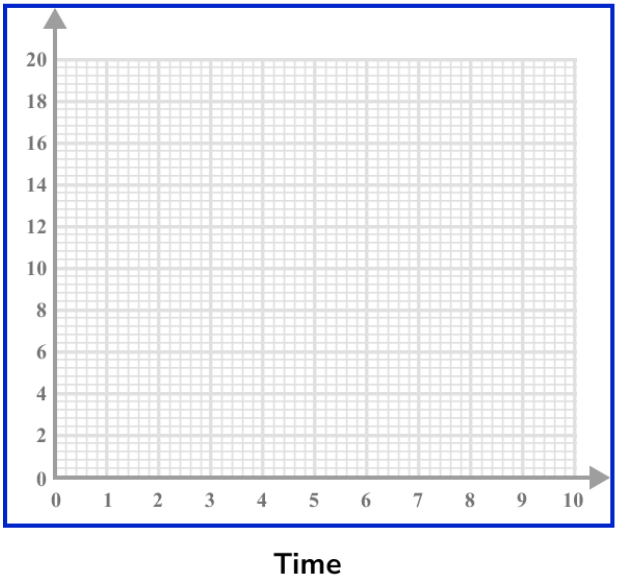
1)

Time	1	3	5	7	9
Frequency	2	6	10	14	18



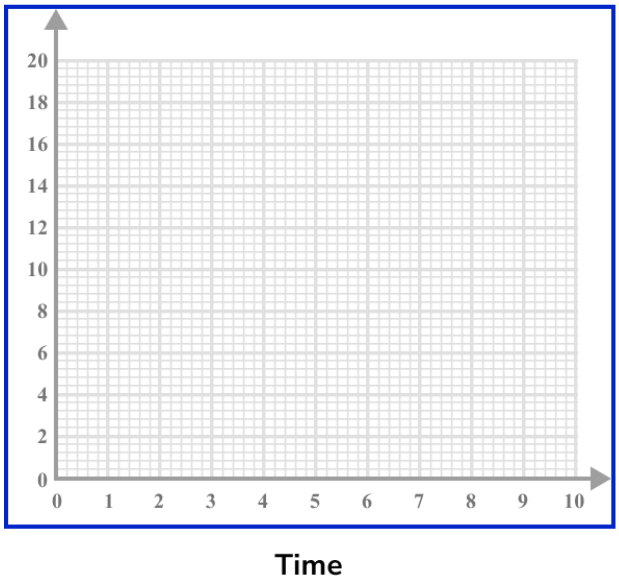
2)

Time	1	3	5	7	9
Frequency	19	10	7	5	2



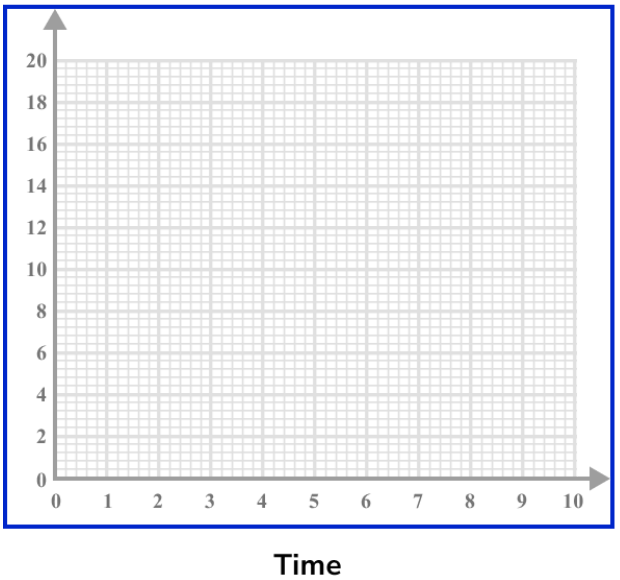
3)

Time	2	4	6	8	10
Frequency	2	13	16	10	10



4)

Time	2	4	6	8	10
Frequency	5	2	15	10	14



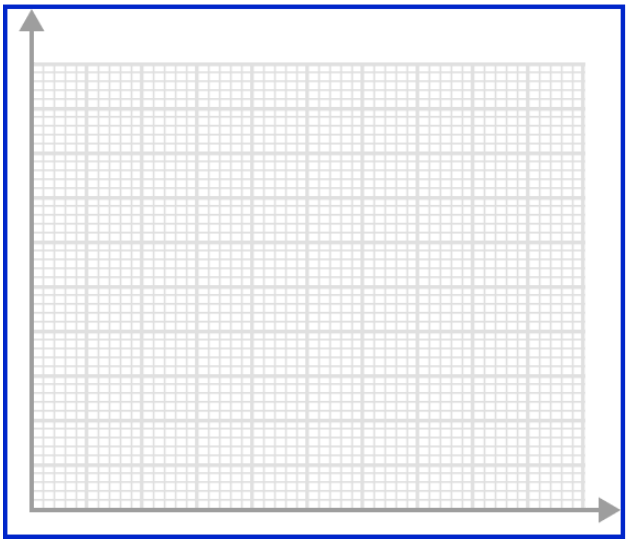
Line Graph - Worksheet

Group B - Drawing line graphs with appropriate scales

Using the tables of values draw the graphs using appropriate scales on the templates provided.

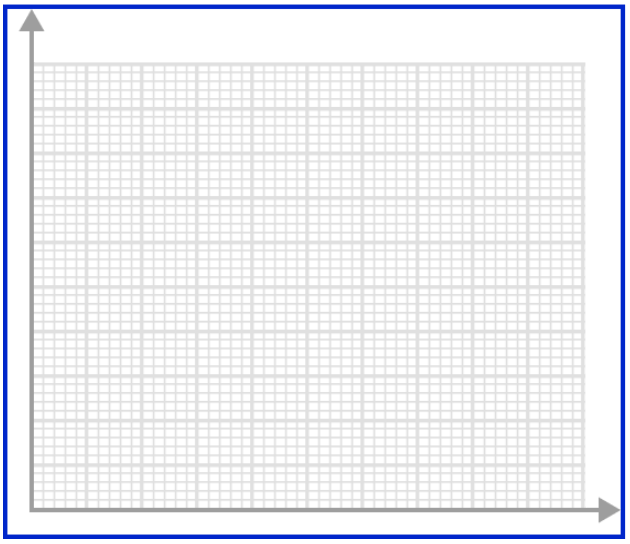
1)

Year	1990	1995	2000	2005	2010
Population	40	44	50	62	88



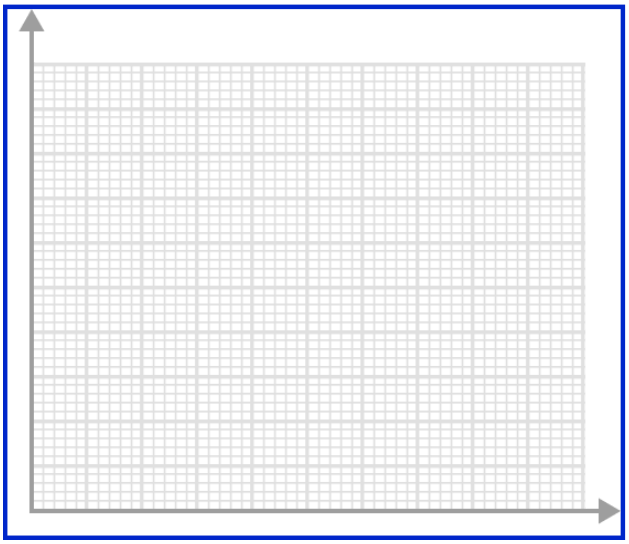
2)

Time	9am	10am	11am	12am	1pm
Price	30p	24p	25p	27p	37p



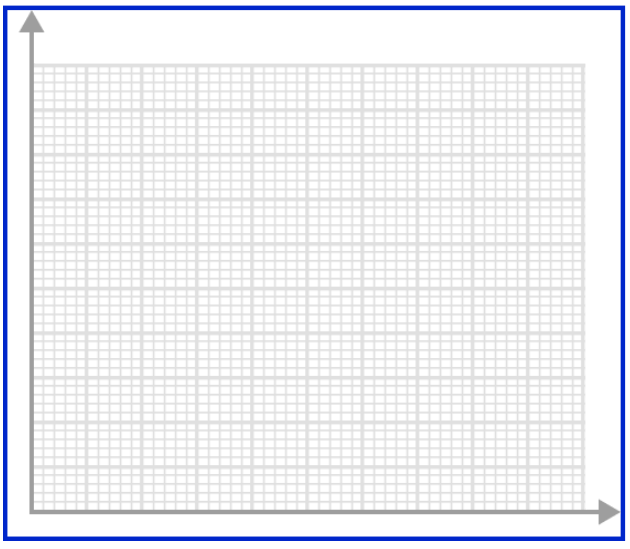
3)

Month	1	2	3	4	5
Height, cm	3	5	10	20	35



4)

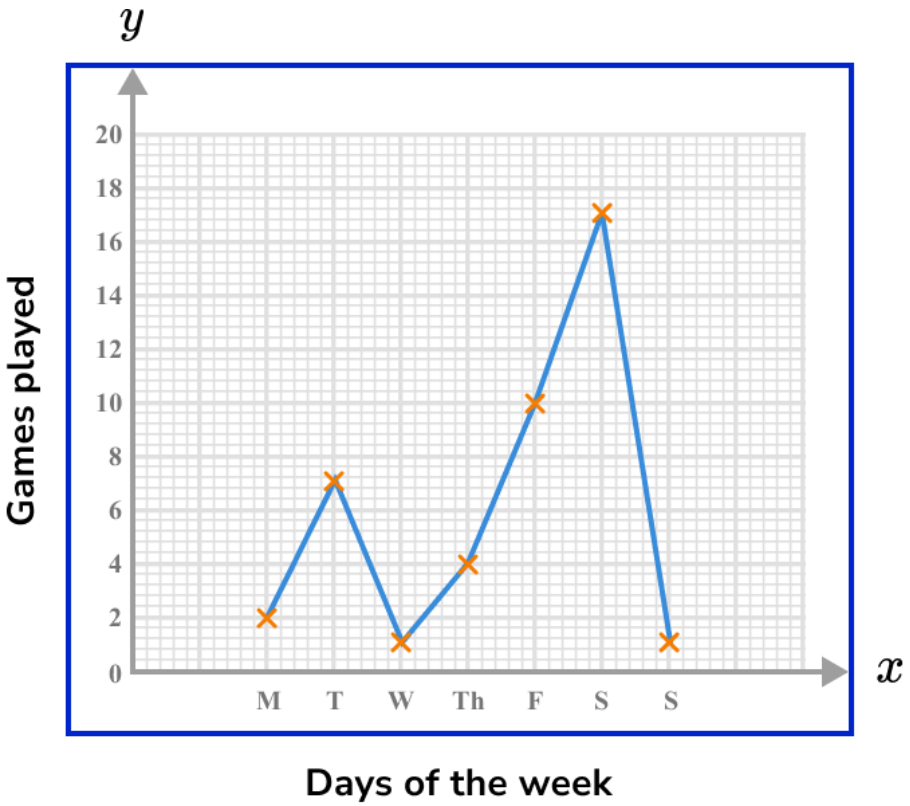
Day	M	T	W	T	F
Temperature	14	16	15	10	9



Line Graph - Worksheet

Group C - Reading line graphs

The number of matches played by a chess player over one week are shown in the line graph below:



Work out:

1) How many games were played on Monday?

2) How many games were played on Tuesday?

3) How many games were played on Wednesday?

4) How many games were played on Thursday?

5) How many games were played on Friday?

6) How many games were played on Saturday?

7) How many games were played on Sunday?

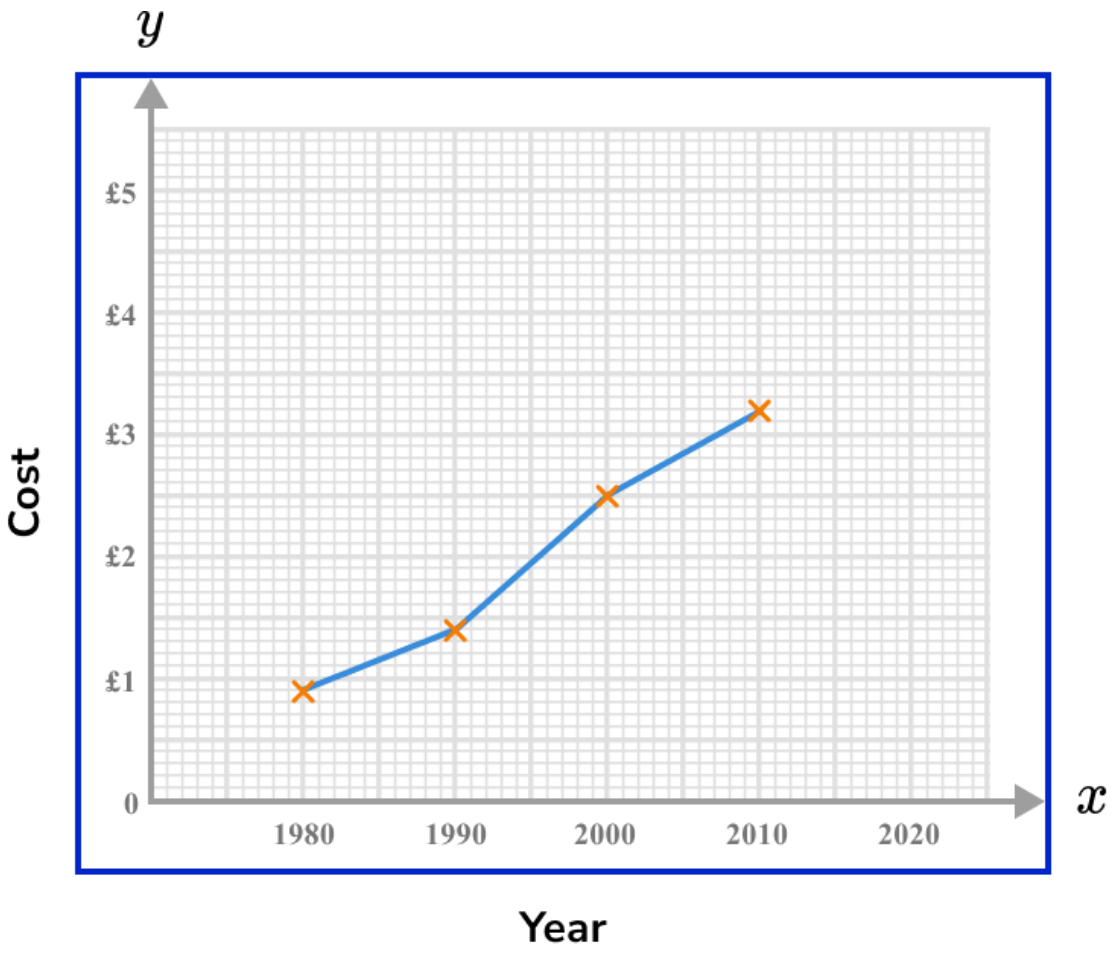
8) Which 2 days have a difference of 8 games played?

9) Which day do you think there was a chess tournament?

Line Graph - Worksheet

Applied

1) The Line graph shows the cost of a cup of tea in a cafe over 30 years.



(a) In which year was the price £2. 50?

(b) What was the cost of tea in 1990?

(c) What is the difference in price between the year 2000 and 2010?

(d) Estimate the price of a cup of tea in 2005.

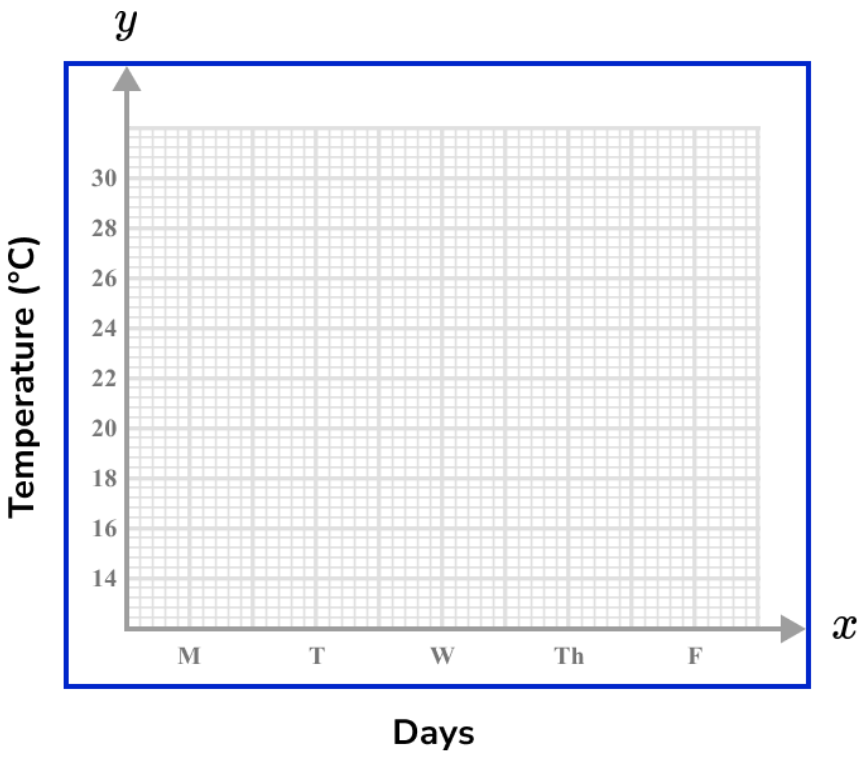
(e) Sam says that the cost of a cup of tea in the cafe will be £3. 60 by 2020
Do you agree with Sam? Explain your answer.

Line Graph - Exam Questions

1) **(a)** The table shows the average daily temperature taken over 5 days in September.

Day	Mon	Tues	Wed	Thurs	Fri
Temperature (°C)	27	30	19	17	20

Use the information in the table to plot a line graph on the axis below.



(2)

(b) Between which two consecutive days was there the biggest difference in temperature?

.....

(1)

(c) Describe the trend in the temperatures over the 5 days.

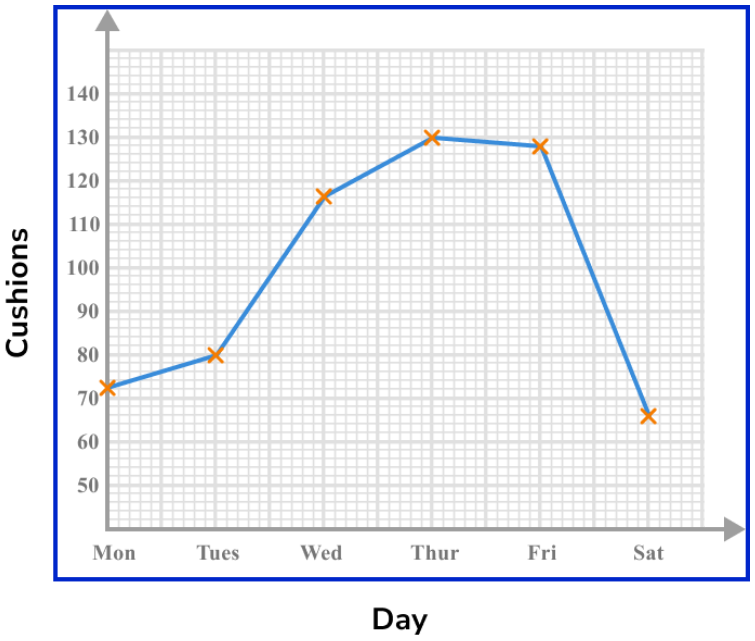
.....

(1)

(4 marks)

Line Graph - Worksheet

2) The graph shows the number of cushions sold in a furniture shop over 6 days.



(a) How many cushions were sold on Thursday?

.....

(1)

(b) Which day had the least cushions sold?

.....

(1)

(c) Blythe says this:

'Between Friday and Saturday the line goes down, this means that less cushions were sold on Friday afternoon than Friday morning.'

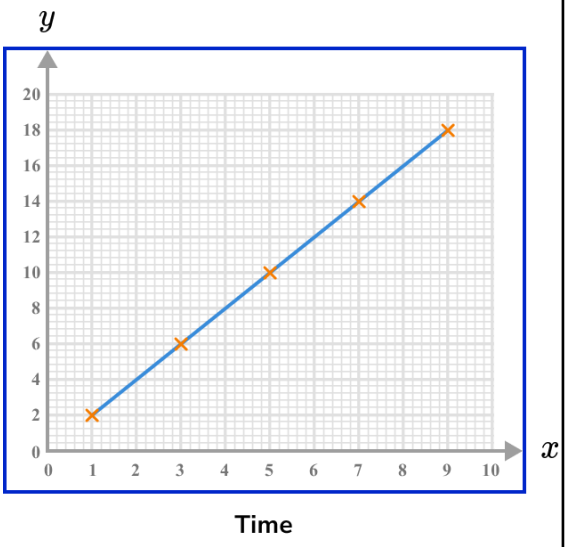
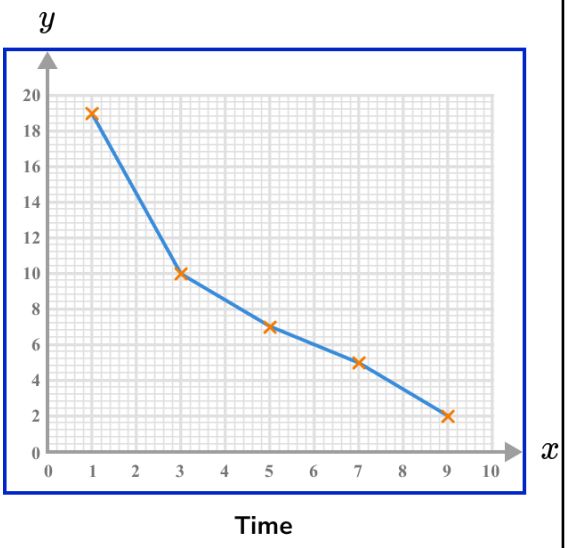
Do you agree with Blythe?
Explain your answer

.....

(2)

(4 marks)

Line Graph - Answers

	Question	Answer
	Skill Questions	
Group A	For each of the following use the templates provided to draw the line graphs **1)** 	Time	1	3	5	7	9
---	---	---	---	---	---
Frequency	2	6	10	14	18 | **2)** | Time	1	3	5	7	9
---	---	---	---	---	---
Frequency	19	10	7	5	2		**1)**  **2)** 

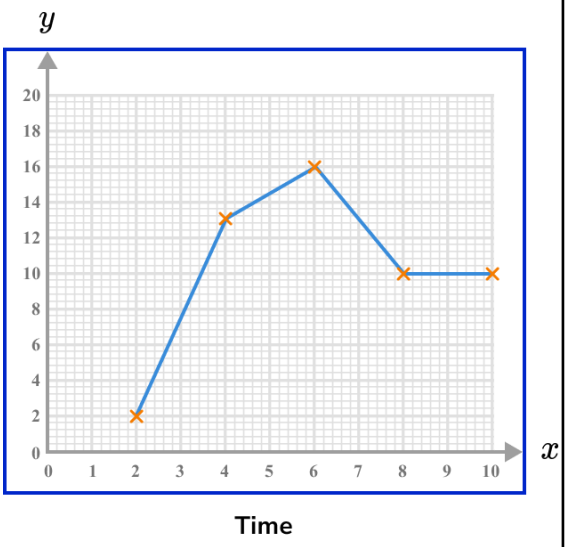
Line Graph - Answers

Group A contd

3)

Time	2	4	6	8	10
Frequency	2	13	16	10	10

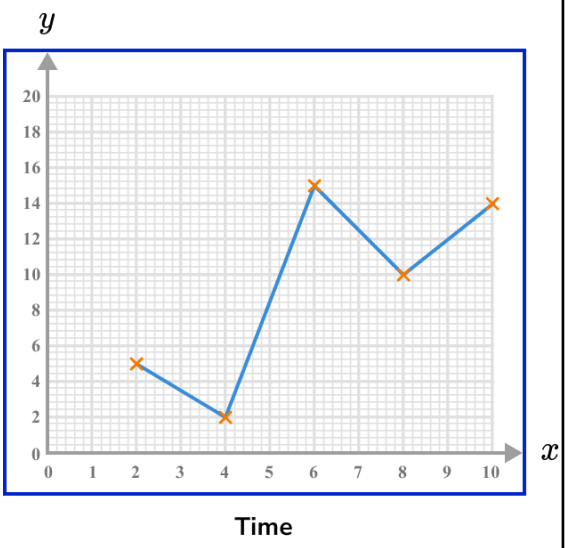
3)



4)

Time	2	4	6	8	10
Frequency	5	2	15	10	14

4)



Line Graph - Answers

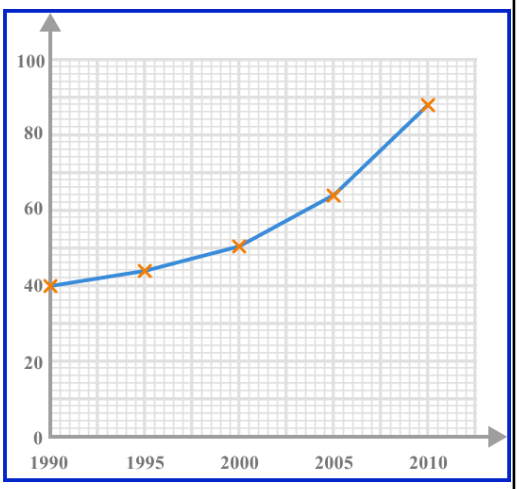
Group B

Drawing line graphs with appropriate scales

1)

Year	1990	1995	2000	2005	2010
Population	40	44	50	62	88

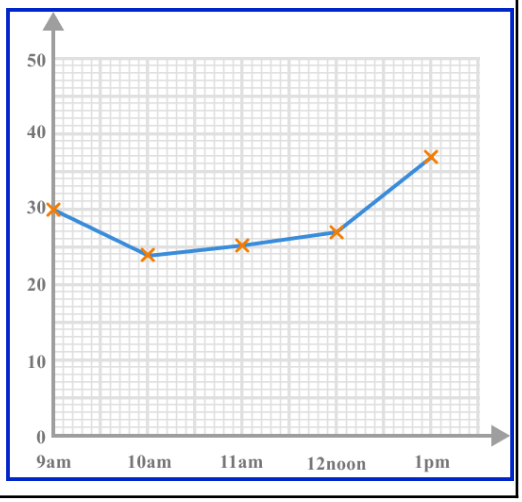
1)



2)

Time	9am	10am	11am	12am	1pm
Price	30p	24p	25p	27p	37p

2)



Line Graph - Answers

Group B contd

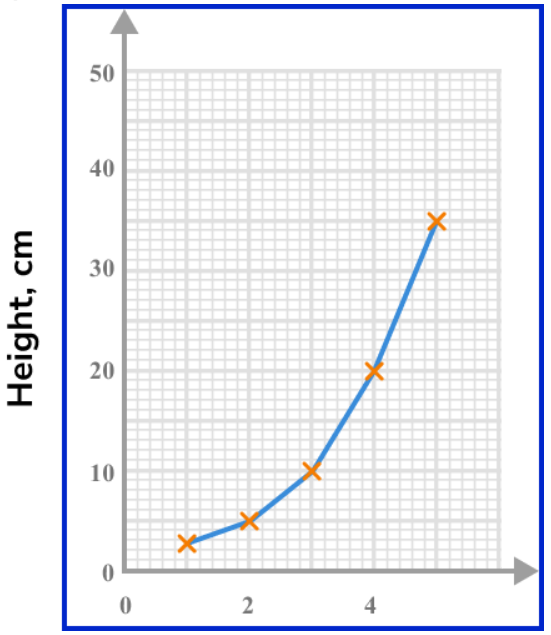
3)

Month	1	2	3	4	5
Height, cm	3	5	10	20	35

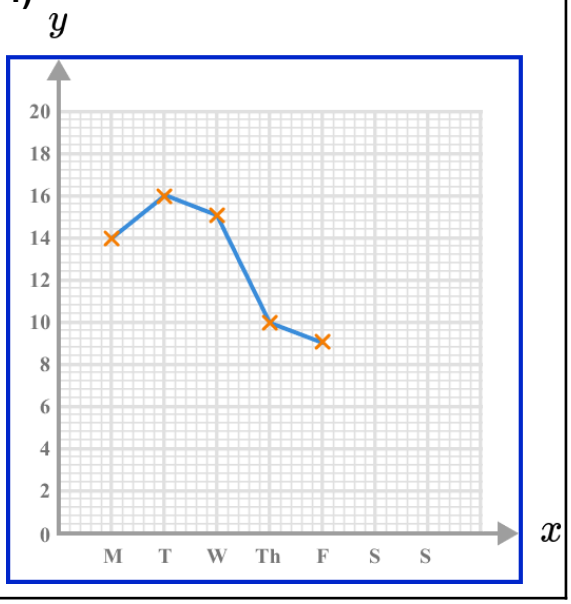
4)

Day	M	T	W	T	F
Temperature	14	16	15	10	9

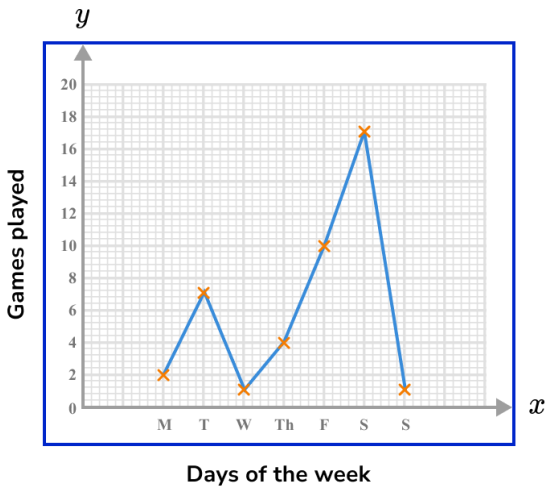
3)



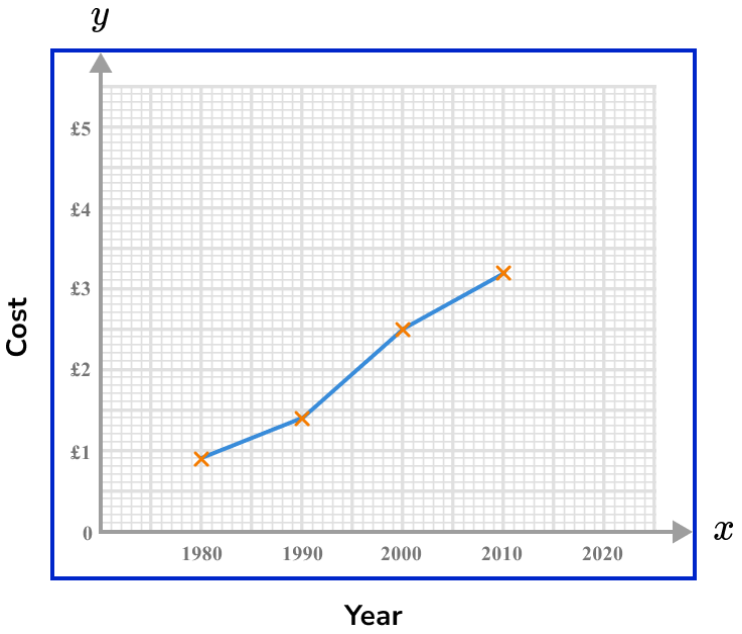
4)



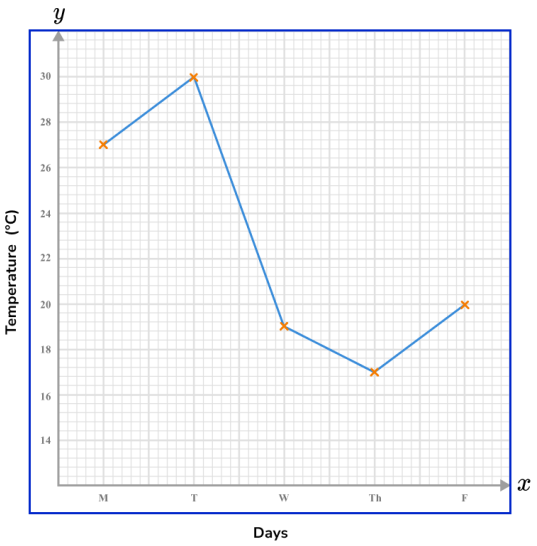
Line Graph - Answers

Group C	The number of matches played by a chess player over one week are shown in the line graph below:  Work out:	
	1) Number of games on Monday?	**1)** 2
	2) Number of games on Tuesday?	**2)** 7
	3) Number of games on Wednesday?	**3)** 1
	4) Number of games on Thursday?	**4)** 4
	5) Number of games on Friday?	**5)** 10
	6) Number of games on Saturday?	**6)** 17
	7) Number of games on Sunday?	**7)** 1
	8) Which 2 days had a difference of 8 games?	**8)** Monday and Friday
	9) Which day was the chess tournament on?	**9)** Saturday

Line Graph - Answers

	Question	Answer
	Applied Questions	
1)	The Line graph shows the cost of a cup of tea in a cafe over 30 years.  **a)** In which year was the price £2. 50? **b)** What was the cost of tea in 1990? **c)** What is the difference in price between the year 2000 and 2010? **d)** Estimate the price of a cup of tea in 2005. **e)** Sam says that the cost of a cup of tea in the cafe will be £3. 60 by 2020 Do you agree with Sam? Explain your answer	**a)** 2000 **b)** £1. 40 **c)** 70 p **d)** £2. 85 Accept $\pm$ 5 pence **e)** Yes. If the price continues to rise at the same rate then the price will be around £3. 60

Line Graph - Mark Scheme

	Question	Answer	
	Exam Questions		
1) (a)	Use the information in the table to plot a line graph on the axis below. Day: Mon, Tues, Wed, Thurs, Fri Temperature (°C): 27, 30, 19, 17, 20	(a) All 5 data points drawn correctly Joined up with straight lines 	(1) (1)
(b)	Between which 2 consecutive days was there the biggest difference in temperature?	(b) Tuesday and Wednesday	(1)
(c)	Describe the trend in the data	(c) The trend is an overall decrease in the average temperature.	(1)
2) (a)	How many cushions were sold on Thursday?	(a) 130	(1)
(b)	Which day had the least number of cushions sold?	(b) Saturday	(1)
(c)	Blythe says this *'Between Friday and Saturday the line goes down, this means that less cushions were sold on Friday afternoon than Friday morning.'* Do you agree with Blythe? Explain your answer	(c) No / Blythe is incorrect We do not know the exact number of cushions sold at particular times in the day **oe**	(1) (1)