

Centre No.						Paper Reference						Surname	Initial(s)	
Candidate No.						1	3	8	0	/	1	F	Signature	

Paper Reference(s)

**1380/1F**

**Edexcel GCSE**

**Mathematics (Linear) – 1380**

Paper 1 (Non-Calculator)

**Foundation Tier**

Monday 6 June 2011 – Afternoon

Time: 1 hour 30 minutes



Examiner's use only

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Team Leader's use only

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**Materials required for examination**

Ruler graduated in centimetres and millimetres, protractor, compasses, pen, HB pencil, eraser.  
Tracing paper may be used.

**Items included with question papers**

Nil

**Instructions to Candidates**

In the boxes above, write your centre number, candidate number, your surname, initials and signature.

Check that you have the correct question paper.

Answer ALL the questions. Write your answers in the spaces provided in this question paper.

**You must NOT write on the formulae page.**

**Anything you write on the formulae page will gain NO credit.**

If you need more space to complete your answer to any question, use additional answer sheets.

**Information for Candidates**

The marks for individual questions and the parts of questions are shown in round brackets: e.g. (2).

There are 29 questions in this question paper. The total mark for this paper is 100.

There are 24 pages in this question paper. Any blank pages are indicated.

**Calculators must not be used.**

**Advice to Candidates**

Show all stages in any calculations.

Work steadily through the paper. Do not spend too long on one question.

If you cannot answer a question, leave it and attempt the next one.

Return at the end to those you have left out.

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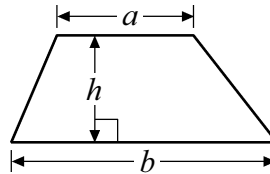
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GCSE Mathematics (Linear) 1380

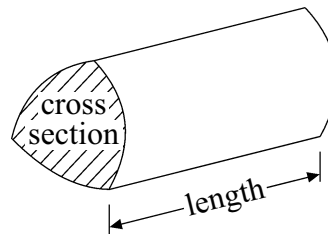
Formulae: Foundation Tier

**You must not write on this formulae page.  
Anything you write on this formulae page will gain NO credit.**

**Area of trapezium** =  $\frac{1}{2}(a + b)h$



**Volume of prism** = area of cross section  $\times$  length



**Answer ALL TWENTY NINE questions.**

**Write your answers in the spaces provided.**

**You must write down all stages in your working.**

**You must NOT use a calculator.**

1. The table gives some information about the number of medals won by each of 6 countries in the 2008 Olympic Games.

Country	Gold	Silver	Bronze	Total
Great Britain	19	13	15	47
France	7	16	17	40
Germany	16	10	15	41
Italy	8	10	10	28
Spain	5	10	3	18
Poland	3	6	1	10

- (a) Write down the number of Gold medals won by Germany.

.....  
(1)

- (b) Write down the country that won the most Bronze medals.

.....  
(1)

- (c) Write down the country that won the same number of Silver medals as Bronze medals.

.....  
(1)

**(Total 3 marks)**

Q1



2. (a) Write the number 1345 in words.

..... (1)

(b) Write the number **twelve thousand seven hundred and fifty** in figures.

..... (1)

(c) Write the number 4670 to the nearest hundred.

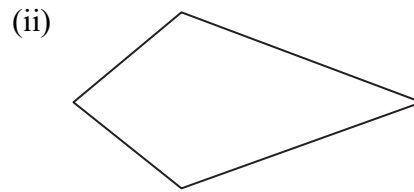
..... (1)

**(Total 3 marks)**

Q2

3. (a) Here are two quadrilaterals.

Write down the mathematical name of each quadrilateral.

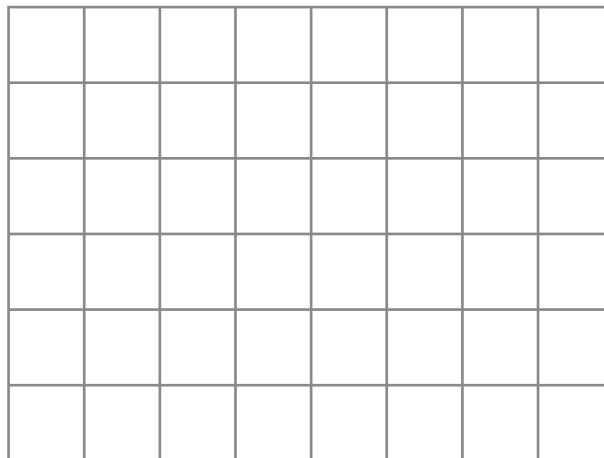


(i) .....

(ii) .....

**(2)**

(b) On the grid, draw a parallelogram.



**(1)**

**(Total 3 marks)**

Q3



4. Simone and Barry use this rule to work out their pay.

$$\text{Pay} = \text{£}6.20 \times \text{number of hours worked}$$

Simone works for 4 hours.

(a) Work out her pay.

£ .....  
(2)

Barry's pay is £15.50

(b) How many hours did he work?

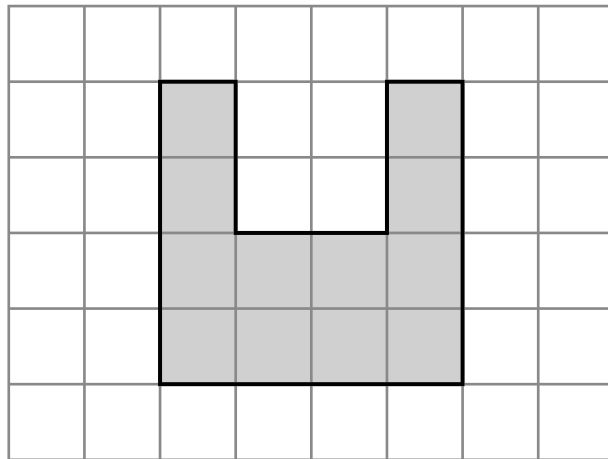
..... hours  
(2)

(Total 4 marks)

Q4



5. This shaded shape is drawn on a grid of centimetre squares.



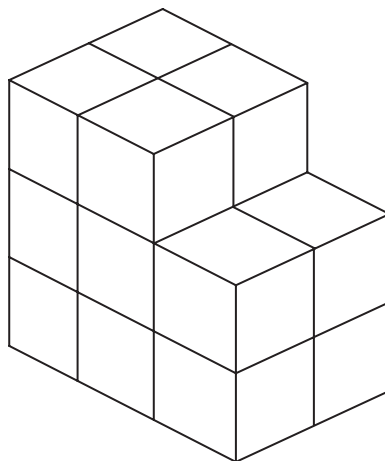
(a) (i) Find the perimeter of the shaded shape.

..... cm

(ii) Find the area of the shaded shape.

..... cm<sup>2</sup>  
(2)

This solid prism is made from centimetre cubes.



(b) Find the volume of the prism.

..... cm<sup>3</sup>  
(1)

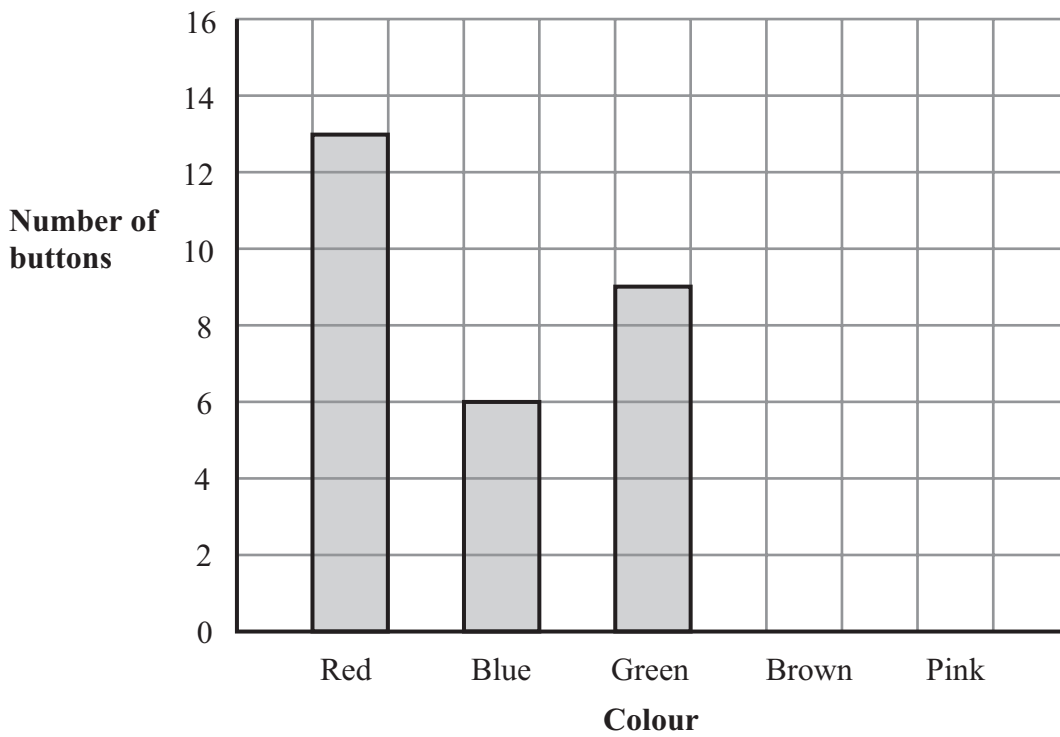
(Total 3 marks)

Q5



6. The incomplete table and bar chart give some information about the colours of buttons in a box.

Colour	Number of buttons
Red	13
Blue	
Green	
Brown	10
Pink	5



(a) Use the bar chart to complete the table.

(2)

(b) Use the table to complete the bar chart.

(2)

(Total 4 marks)

Q6



7. (a) Write  $\frac{10}{3}$  as a mixed number.

.....  
(1)

(b) Here are two fractions

$$\frac{3}{5} \text{ and } \frac{2}{3}$$

Which is the larger fraction?  
You must show your working to explain your answer.

.....  
(3)

(c) Work out  $\frac{4}{5} \times \frac{3}{8}$

Give your fraction in its simplest form.

.....  
(2)

**(Total 6 marks)**

Q7





8. (a) Write down the value of  $\sqrt{36}$

.....  
(1)

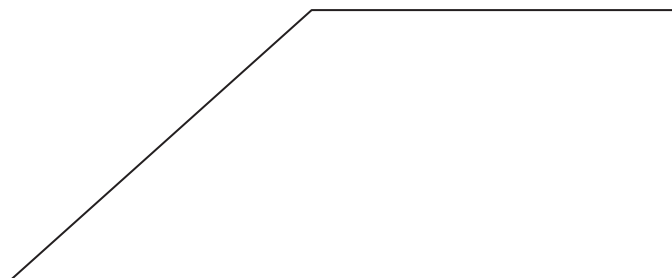
(b) Estimate  $\sqrt{200}$   
Explain how you got your answer.

.....  
.....  
(2)

(Total 3 marks)

Q8

9. Here is a trapezium.



In the trapezium,

- (i) mark with arrows ( $>>$ ) the pair of parallel lines,
- (ii) mark with the letter O the obtuse angle,
- (iii) measure the size of the acute angle.

.....<sup>o</sup>

(Total 3 marks)

Q9



10. Here are the first four terms in a number sequence.

7    12    17    22

(a) (i) Write down the next term in this number sequence.

.....

(ii) Give a reason for your answer.

.....  
(2)

(b) Work out the tenth term in this number sequence.

.....  
(1)

(c) Robert says,

‘The hundredth term in this number sequence is 504’.

He is **wrong**.  
Explain why.

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

**(Total 4 marks)**

Q10



11. (a) Work out  $700 - 547$

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

(b) Work out  $354 \times 26$

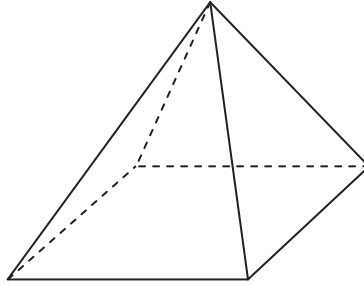
.....  
**(3)**

**(Total 4 marks)**

**Q11**



12. Here is a diagram of a solid 3-D shape.



(a) Write down the mathematical name of the 3-D shape.

.....  
(1)

(b) Write down the number of faces.

.....  
(1)

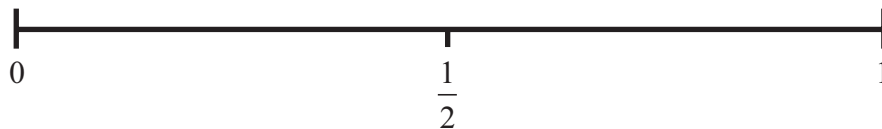
(c) Write down the number of edges.

.....  
(1)

**(Total 3 marks)**

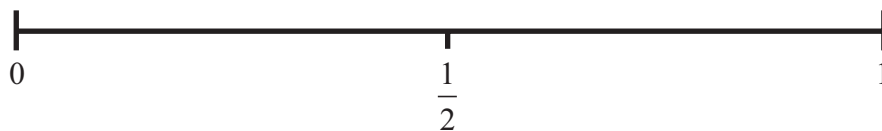
Q12

13. (a) On the probability scale below, mark with a cross (×) the probability that a boy will grow to a height of 5 metres.



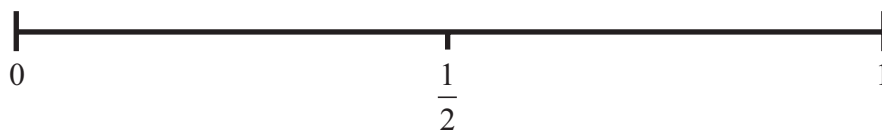
(1)

(b) On the probability scale below, mark with a cross (×) the probability that the sun will rise tomorrow.



(1)

(c) On the probability scale below, mark with a cross (×) the probability that you will get a 6 when you roll a fair dice.



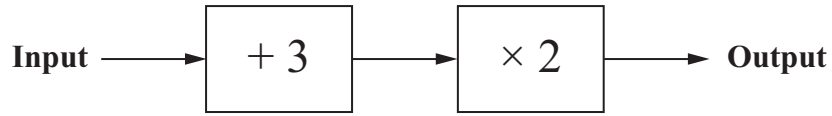
(1)

**(Total 3 marks)**

Q13



14. Here is a two-stage number machine.



The machine adds 3 and then multiplies by 2

Complete the table.

Input	Output
2	10
5	16
7	.....
.....	36

(Total 2 marks)

Q14



15. The diagram shows part of a map.  
It shows the positions of a castle and a church.



The scale of the map is 1:10 000

- (a) Work out the real distance between the castle and the church.  
Give your answer in metres.

..... m  
(2)

- (b) Find the bearing of the castle from the church.

.....  
(1)

(Total 3 marks)

Q15



16. The table shows part of a train timetable from Weymouth to London Waterloo.

<b>Weymouth</b>	09 03	09 20	10 03	10 20	11 03
<b>Poole</b>	09 40	10 07	10 40	11 07	11 40
<b>Bournemouth</b>	09 53	10 17	10 54	11 17	11 54
<b>Southampton</b>	10 26	10 58	11 28	11 58	12 28
<b>Woking</b>	11 19		12 19		13 19
<b>London Waterloo</b>	11 49	12 20	12 49	13 20	13 49

A train leaves Weymouth at 09 03

(a) At what time should it arrive at London Waterloo?

.....  
(1)

Another train leaves Poole at 11 40

(b) How many minutes should it take to travel to Bournemouth?

..... minutes  
(1)

Sally lives in Weymouth.

She has a meeting in Southampton at 12 00

When Sally arrives at Southampton she takes 25 minutes to travel to her meeting.

(c) What is the time of the latest train she can take from Weymouth?

.....  
(1)

(Total 3 marks)

Q16



17. Work out an estimate for  $\frac{7.19 \times 19.7}{0.46}$

Leave blank

.....

(Total 3 marks)

Q17

18. The two-way table shows some information about where 50 people went to university.

	Scotland	Wales	England	Total
Male			19	25
Female	4	5		
Total	7			50

(a) Complete the two-way table.

(3)

One of these people is picked at random.

(b) Work out the probability that this person

(i) went to university in Scotland,

.....

(ii) is a female who did **not** go to university in England.

.....

(2)

(Total 5 marks)

Q18





19. Amy buys 50 computers.  
She pays £160 for each computer.

Amy is going to sell **some** of the computers.  
She wants to get at least 35% more than she paid for **all** the computers.  
She is going to sell each computer for £400

Work out the smallest number of computers Amy needs to sell.

Q19

.....

(Total 4 marks)



20. The table gives the maximum speeds of two cars, car A and car B.

	Car A	Car B
Maximum speed	184 km/h	120 mph

Which car has the greater maximum speed?  
You must show clearly how you get your answer.

Q20

(Total 2 marks)

21.  $H = 2a + 3b$

$a = 5$

$b = -1$

(a) Work out the value of  $H$ .

.....  
(2)

$P = 3h^2$

$h = -4$

(b) Work out the value of  $P$ .

.....  
(2)

(Total 4 marks)

Q21



22. Some students went to the cinema.  
Each student watched film A or film B or film C.

$\frac{3}{8}$  of the students watched film A.

40% of the students watched film B.

What fraction of the students watched film C?

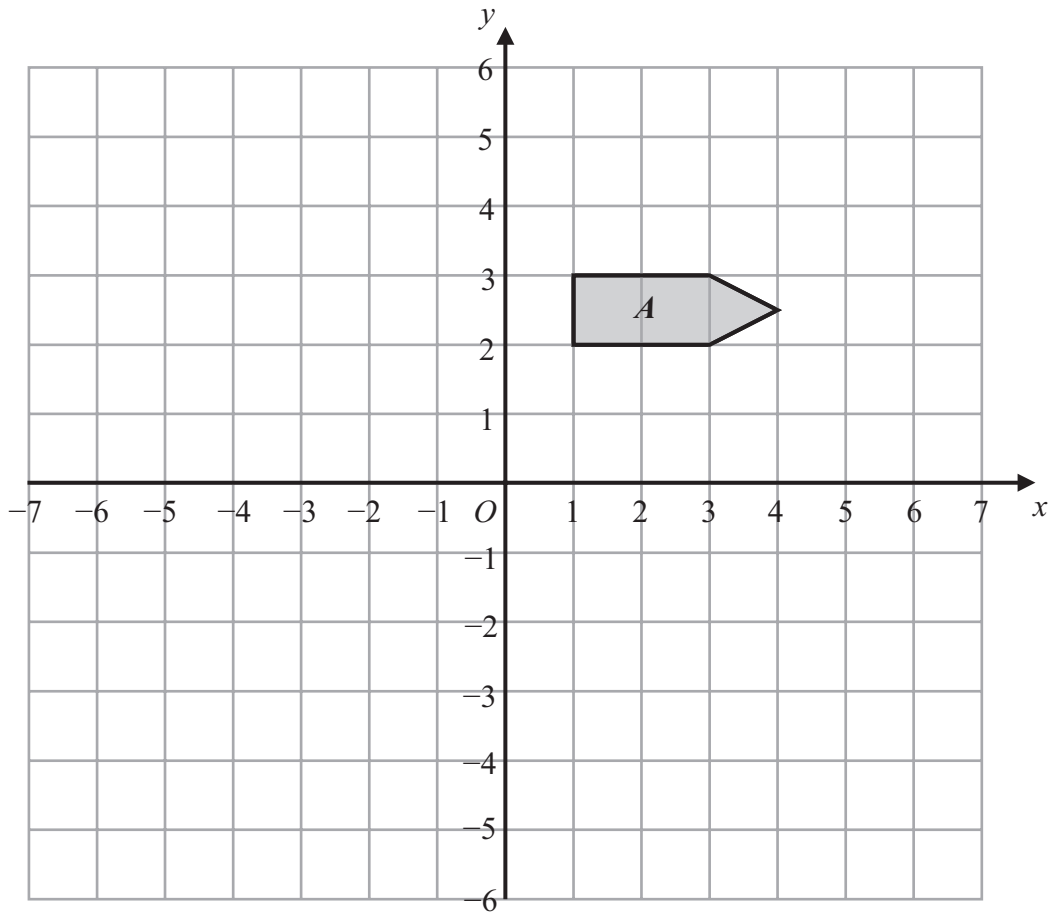
.....

**(Total 3 marks)**

**Q22**

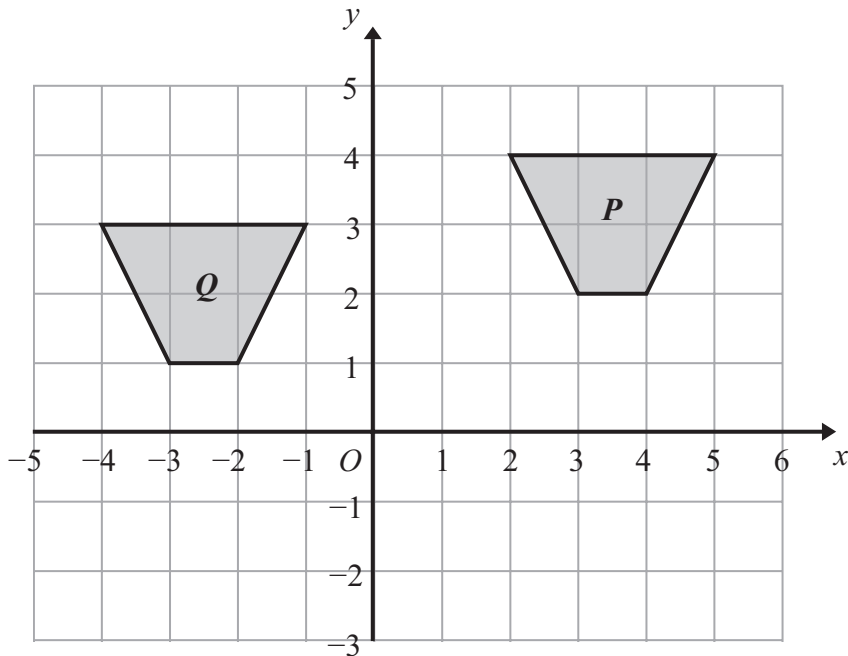


23.



(a) On the grid above, reflect shape *A* in the line  $x = -1$

(2)



(b) Describe fully the single transformation that will map shape *P* onto shape *Q*.

.....  
 .....

Q23

(2)

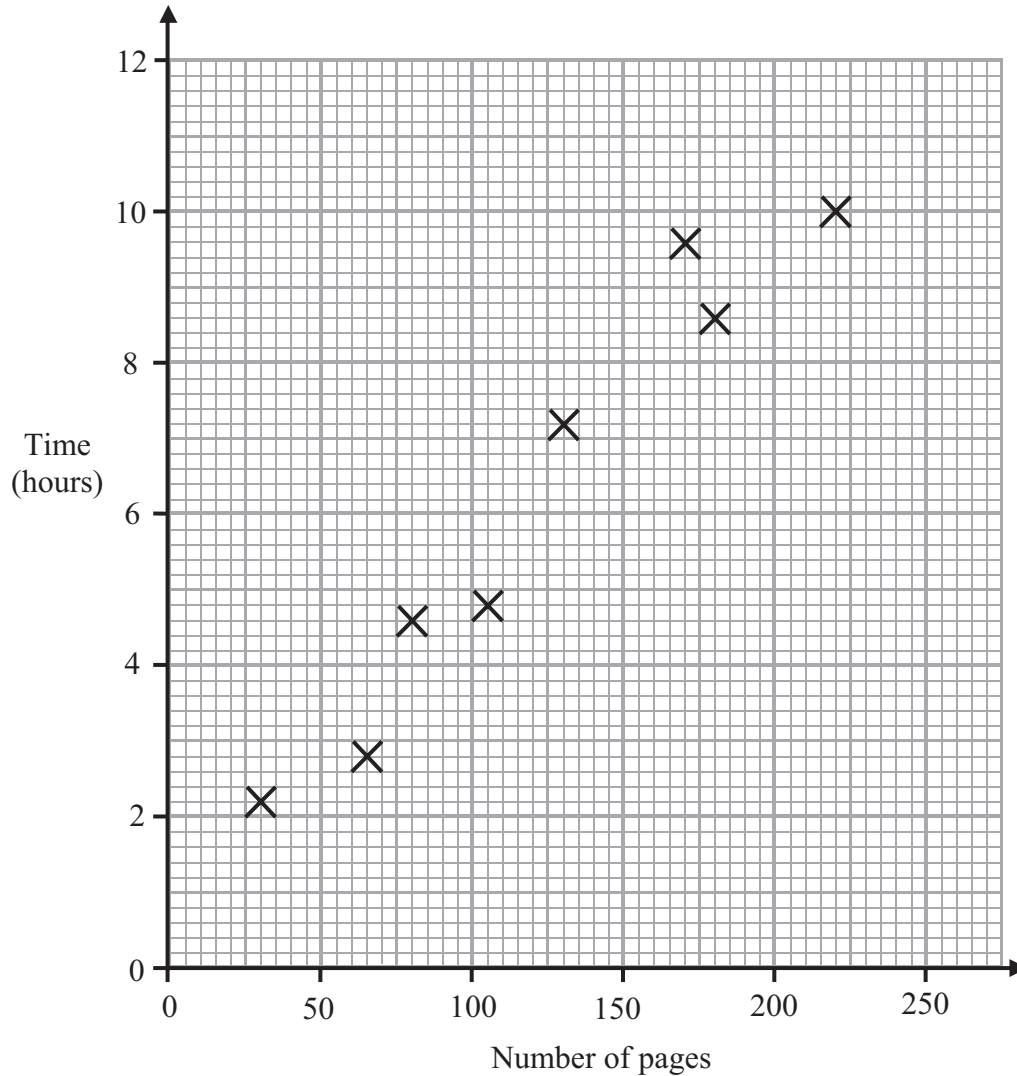
(Total 4 marks)



24. Harriet reads eight books.

For each book she records the number of pages and the time she takes to read it.

The scatter graph shows information about her results.



(a) Describe the relationship between the number of pages in a book and the time Harriet takes to read it.

.....  
(1)

Harriet reads another book.  
The book has 150 pages.

(b) Estimate the time it takes Harriet to read it.

..... hours  
(2)

(Total 3 marks)

Q24



25.

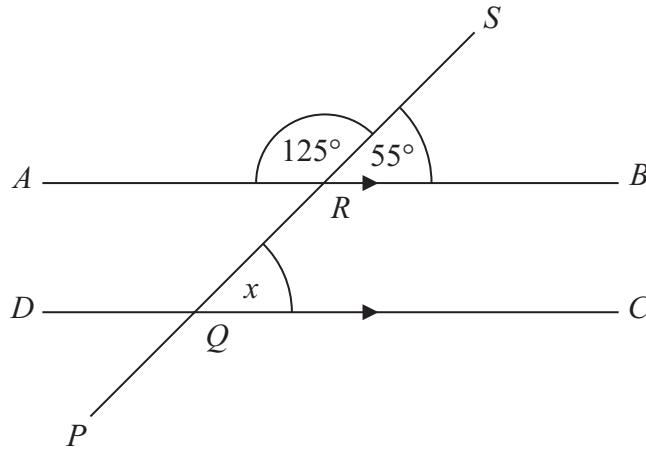


Diagram **NOT** accurately drawn

*ARB* is parallel to *DQC*.

*PQRS* is a straight line.

Angle *SRB* =  $55^\circ$ .

(i) Find the size of the angle marked *x*.

.....  
°

(ii) Give a reason for your answer.

.....

**(Total 2 marks)**

Q25

26. (a) Expand  $x(x + 2)$

.....  
**(2)**

(b) Factorise  $15x - 10$

.....  
**(2)**

(c) Expand and simplify  $(x + 3)(x - 4)$

.....  
**(2)**

**(Total 6 marks)**

Q26



27. Peter, Tarish and Ben share £54

Tarish gets three times as much money as Peter.  
Ben gets twice as much money as Tarish.

How much money does Ben get?

£ .....

**(Total 3 marks)**

**Q27**

28. Sophie wants to find out the amount of time people exercise.  
She will use a questionnaire.

Design a suitable question for Sophie to use in her questionnaire.  
You must include some response boxes.

**(Total 2 marks)**

**Q28**



29.

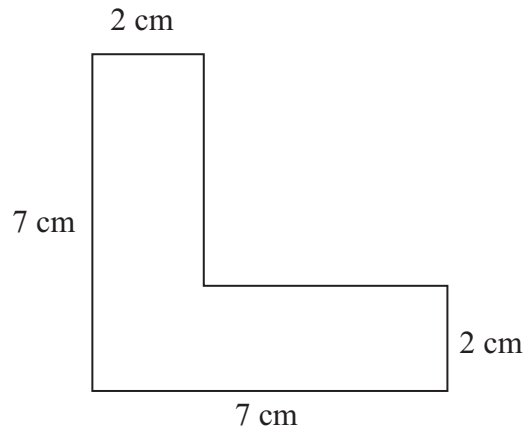


Diagram **NOT** accurately drawn

The diagram shows the cross-section of a solid prism.  
The length of the prism is 2 m.

The prism is made from metal.  
The density of the metal is 8 grams per  $\text{cm}^3$ .

Work out the mass of the prism.

Q29

.....

(Total 5 marks)

**TOTAL FOR PAPER: 100 MARKS**

**END**

