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

Paper Reference(s)

1380/1F

## **Edexcel GCSE**

Mathematics (Linear) – 1380

Paper 1 (Non-Calculator)

# **Foundation Tier**

Monday 7 June 2010 – Afternoon

Time: 1 hour 30 minutes



N

#### Materials required for examination

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

#### **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 28 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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Examiner's use only

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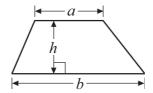
### GCSE Mathematics (Linear) 1380

Formulae: Foundation Tier

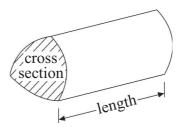
You must not write on this formulae page.

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



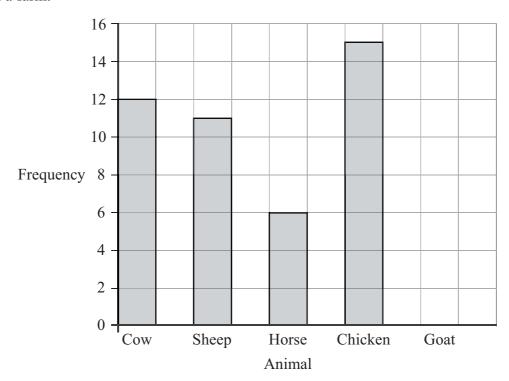
#### Answer ALL TWENTY EIGHT questions.

Write your answers in the spaces provided.

You must write down all stages in your working.

You must NOT use a calculator.

1. The bar chart gives information about the numbers of cows, sheep, horses and chickens on a farm.



(a	.) `	Write	down	the	numb	er	of	horses	on	the	farm	i.
----	------	-------	------	-----	------	----	----	--------	----	-----	------	----

(1)

(b) Write down the number of sheep on the farm.

(1)

There are also 7 goats on the farm.

(c) Use this information to complete the bar chart.

(1)

(Total 3 marks)

Q1

2.	(a)	Write the number <b>fifteen thousand</b> , <b>six hundred and seventy two</b> in figures.	Leave blank
2.	(a)	write the number inteen thousand, six number and seventy two in figures.	
		(1)	
	(b)	Write the number 3020 in words.	
		(1)	
	(a)	White the growth on 8106 to the grounds broad and	
	(c)	Write the number 8196 to the nearest hundred.	
		(1)	
	(d)	Write down the value of the 6 in the number 236 894	
		(1)	Q2
		(Total 4 marks)	
3.	(a)	Measure the length of $PQ$ .	
		Give your answer in centimetres.	
		P ————— $Q$	
		~	
		cm	
		(1)	
	(b)	Measure the size of angle $x$ .	
		0	
		(1)	
	(c)	What type of angle is angle <i>x</i> ?	
		(1)	Q3
		(Ta4al 2 lan)	
		(Total 3 marks)	

4.	Write these numbers in order of size. Start with the smallest number.	Leave blank
	(a) 7, -2, -6, 1, -3	
	(1)	
	Write these numbers in order of size. Start with the smallest number.	
	(b) 0.06, 0.35, 0.63, 0.3, 0.56	
	(1)	<b>Q4</b>
	(Total 2 marks)	
5.	Kunal goes to a café. He can choose one drink and one snack.	
	Drinks Snacks	
	Milk Apple	
	Juice Sandwich Water Biscuit	
	One possible combination is (Mills Apple)	
	One possible combination is (Milk, Apple).  Write down all the possible combinations Kunal can choose.	
	The first one has been done for you.	
	(M, A)	
		Q5
	(Total 2 marks)	

Не	re are some patterns	made from s	ticks.					
		/\	/	7		$\sqrt{}$	<u></u>	
_			_//		_		·	7
Pat	tern number 1	Pattern	number 2	2		Pattern	number 3	
(a)	In the space below,	draw Pattern	n number	4				
								(1)
(b)	Complete the table.							(1)
(0)	Complete the table.		П		Г			
	Pattern number		1	2	3	4	5	
	Number of sticks		3	5	7			
								(1)
(c)	How many sticks an	re in Pattern	number	12?				
						•••••	•••••	(1)
	n wants to find the n	umber of stic	oks in Dat	tern num	her 100			(1)
R	n wants to find the fil			cern nun	1001 100			
	White 1							
	Write down a method	od he could	use.					
	Write down a metho	od he could	use. 	•••••				
	Write down a metho	od he could						



7.	Here is a list of 8 numbers.	Leave blank
	4 7 10 16 18 20 21 32	
	From the numbers in the list write down a number that is	
	(i) an odd number	
	(ii) a multiple of 5	
	(iii) a square number	
	(iv) a factor of 42	
		<b>Q7</b>
	(Total 4 marks)	
8.	The diagram shows a shaded rectangle drawn on a centimetre grid.	
	(a) Find the area of the sheded rectangle	
	(a) Find the area of the shaded rectangle. State the units of your answer.	
	(2)	
	(b) Find the perimeter of the shaded rectangle.	
	cm	Q8
	(1) (Total 3 marks)	

9. The table shows some information about boxes of cereal on sale in a supermarket.

Cereal	Weight of 1 box	Cost of 1 box
Coco Pops	600 g	£2.79
Cornflakes	375 g	£1.26
Frosties	500 g	£1.55
Rice Krispies	600 g	£2.43
Shreddies	500 g	£1.85

(	(a)	How	much	does	а	box	of	Frosties	cost?
١	$a_{j}$	110 00	mucn	uocs	а	UUA	$\mathbf{o}_{\mathbf{I}}$	11031103	COSt:

£.....(1)

A box of cereal has a weight of 375 g.

(b) Write down the name of this cereal.

(1)

A box of cereal has a weight of 600 g and costs less than £2.50

(c) Write down the name of this cereal.

(1)

Ed buys

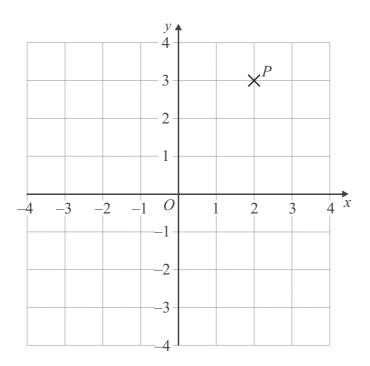
one box of Coco Popsand two boxes of Shreddies.

(d) How much money in total does Ed spend?

£.....(2)

**Q9** 





(a) Write down the coordinates of the point P.

(.....)

- (b) (i) On the grid, plot the point (1, 2). Label the point Q.
  - (ii) On the grid, plot the point (-3, -2). Label the point R.

**(2)** 

Q10

11.	ames has 9 cards.	Leave
	Each card has a shape drawn on it. Each shape is a circle $\bigcirc$ or a square $\square$ or a triangle $\triangle$ .	
	ames takes a card at random.	
	i) Which shape is <b>most</b> likely to be on the card?	
	ii) What is the probability that James takes a card that has a square ■ on it?	
		Q11
12	(Total 3 marks)	)
12.	Alan recorded the numbers of text messages sent by 7 people one day.  6 9 15 4 8 12 6	
	a) Find the mode.	
	(1)	
		'
	b) Work out the range.	,
	b) Work out the range.	
	b) Work out the range.  (2)	
	b) Work out the range.  (2)	

13. The table shows the percentage of each type of book in a library.

Type of book	Percentage
Children's	24%
General	42%
Mystery	13%
Romance	15%
Science fiction	2%
Thriller	4%

(a)	What type of	book has	the smalle	est percentage?
-----	--------------	----------	------------	-----------------

(1)

(b) Write 13% as a decimal.

(1)

(c) Write 24% as a fraction. Give your answer in its simplest form.

(2)

There are 3000 books in the library.

(d) Work out 15% of 3000

(2)

(Total 6 marks)

Q13

			Leave blank
14.	Tanaka says 'When you multiply an odd number and an even number togeth always get an odd number'.	ier, you will	
	Show that Tanaka is wrong.		
			Q14
	(Tota	al 2 marks)	

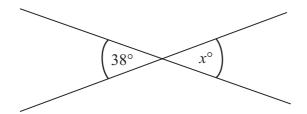


Diagram **NOT** accurately drawn

(a) (i) Write down the value of x.

.....

(ii) Give a reason for your answer.

(2)

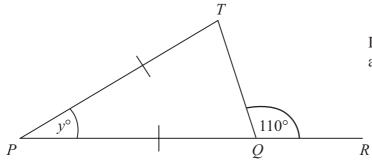


Diagram **NOT** accurately drawn

PQR is a straight line.

PT = PQ.

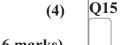
(b) (i) Work out the value of y.

.....

(ii) Give reasons for your answer.

.....

.....



**16.** (a) Simplify p + p + p + p

(1)

(b) Simplify  $m \times m \times m$ 

(1)

B = 2k + 12

k = 5

(c) Work out the value of B.

B = (2)

T = 4w - 2

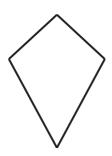
T = 22

(d) Work out the value of w.

 $w = \dots$ 

Q16

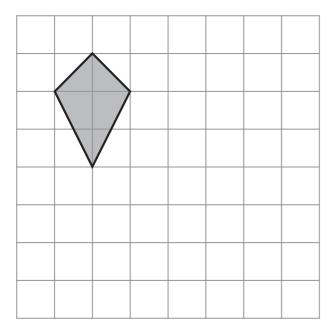
17. Here is a quadrilateral.



(a) Write down the mathematical name of this quadrilateral.

(1)

(b) On the grid below, show how the shaded shape can tessellate. You should draw at least six shapes.



**(2)** 

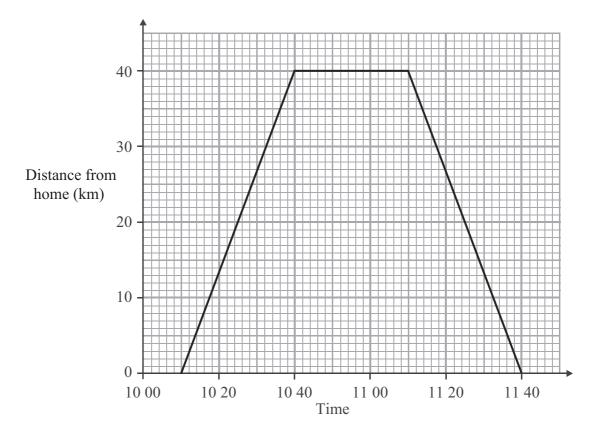
Q17

10		Leave blank
18.	Lesley goes to the cinema.	
	The film starts at 18 10 The film lasts for 135 minutes.	
	(a) At what time does the film finish?	
	(3)	
	There are 300 people in the cinema.	
	$\frac{1}{6}$ of the 300 people are boys.	
	$\frac{3}{10}$ of the 300 people are girls.	
	The rest of the people are adults.	
	(b) Work out how many people are adults.	
	(4)	Q18
	(Total 7 marks)	
	(Total / Marks)	
		I



**19.** Nigel travelled from his home to his friend's house 40 km away. Nigel stayed for some time at his friend's house before returning home.

Here is a distance-time graph for Nigel's journey.



(a) At what time did Nigel leave home?

(1)

(b) How far was Nigel from home at 10 20?

..... km (1)

(c) How many minutes did Nigel spend at his friend's house?

..... minutes

(1)

Q19



Leave blank

**20.** (a) Work out  $\frac{2}{3} \times \frac{1}{5}$ 

(1)

(b) Work out  $\frac{1}{7} + \frac{2}{21}$ 

(2) Q20

(Total 3 marks)

21. Here are the weights, in grams, of 16 eggs.

47 45

50

53

43

55

61

53

62

58

56

57

47

62

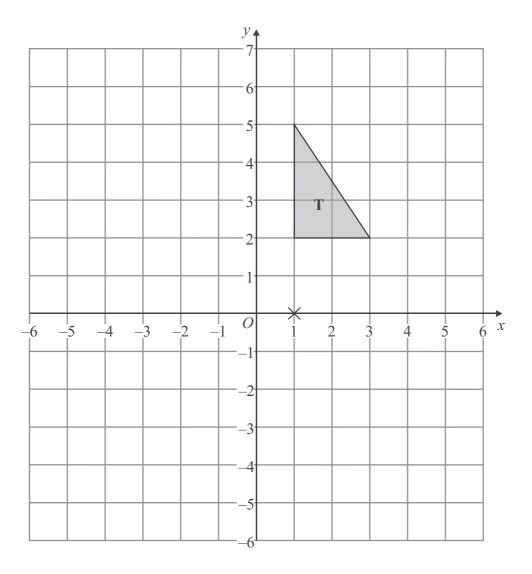
58

58

Draw an ordered stem and leaf diagram to show this information. You must include a key.

Key:

Leave blank



Triangle T has been drawn on the grid.

Rotate triangle T  $180^{\circ}$  about the point (1, 0). Label the new triangle **A**.

**Q22** 

Leave blank 23. y Q P Describe fully the single transformation which maps shape  ${\bf P}$  onto shape  ${\bf Q}$ . Q23 (Total 3 marks)

<b>24.</b> Anil wants to find o	out how many DVDs p	people buy.		Leave blank
	on on a questionnaire.			
How many DVDs	do you buy?			
1 – 5	5 – 10	10 – 15	15 – 20	
Write down <b>two</b> di	fferent things wrong w	ith this question.		
2				
				Q24
			(Total 2 marks)	
25. Anna and Bill share	e £40 in the ratio 2:3			
Work out how muc	h each person gets.			
		Anna	£	
		Bill	£	Q25
			(Total 3 marks)	



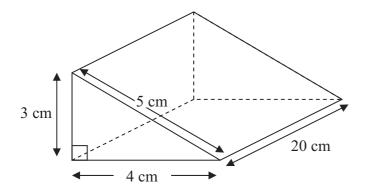


Diagram **NOT** accurately drawn

Work out the volume of the triangular prism.

..... cm

**Q26** 

(Total 2 marks)

**27.** Work out  $4.52 \times 36$ 

Q27

Leave
blank

**28.** (a) Factorise 3x + 12

.....(1)

(b) Solve 4(2x-3) = 5x + 7

 $x = \dots$  (3)

(c) Expand and simplify (y+4)(y+5)

(2)

(Total 6 marks)

**TOTAL FOR PAPER: 100 MARKS** 

**END** 



**Q28**