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

Paper Reference(s)

# 1380/3H

# **Edexcel GCSE**

Mathematics (Linear) – 1380

Paper 3 (Non-Calculator)

# Algebra for Foundation

Past Paper Questions Arranged by Topic

### 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

Nii

## **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 26 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.

Lots more free papers at: <a href="http://bland.in">http://bland.in</a>
Compiled by Peter Bland





Examiner's use only

Team Leader's use only

1. Kalim thinks of a number.

He multiplies the number by 2 He then adds 3

His answer is 27

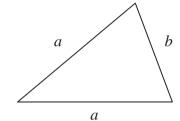
(a) What number did Kalim think of?

**(2)** 

Emma uses the formula P = 2a + bto find the perimeter P of this triangle.

(b) Find the value of P when

a = 5 and b = 3



**(2)** 

Q1

(Total 4 marks)

2. (a) Work out the value of

(i)  $4^2$ 

(ii)  $\sqrt{64}$ 

(iii)  $3 \times 2^3$ 

**(3)** 

(b) Work out

(i) -2+5

(ii) -2 - 3

**(2)** 

(Total 5 marks)

Q2

3. The cost of hiring a car can be worked out using this rule.

Cost = £90 + 50p per mile

Bill hires a car and drives 80 miles.

(a) Work out the cost.

£ .....(2)

The cost of hiring a car and driving m miles is C pounds.

(b) Complete the formula for C in terms of m.

 $C = \dots$  (2)

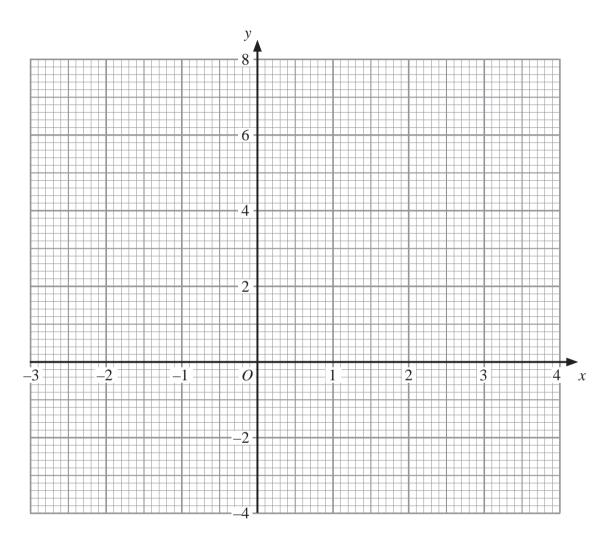
(Total 4 marks)

Q3

**4.** (a) Complete this table of values for y = 2x - 1

x	-1	0	1	2	3	4
у		-1		3	5	

**(2)** 



(b) On the grid, draw the graph of y = 2x - 1

(2) **Q4** 

(Total 4 marks)

5. Work out an estimate for the value of	$\frac{31\times4.92}{0.21}$	Leave blank
	(Total 3 marks)	Q5
<b>6.</b> (a) Expand $y(2y - 3)$		
(b) Factorise $x^2 - 4x$	(1)	
	(2)	
$k$ is an integer such that $-1 \le k < 3$		
(c) List all the possible values of $k$ .		
	(2)	<b>Q6</b>
	(Total 5 marks)	

<b>7.</b> (a) Factorise $x^2 - 5x$	Leave blank
(2)	
(b) Expand $3(5x-2)$	
(e) e(en	
	07
(1)	<b>Q7</b>
(Total 3 marks)	
8. A hotel has 56 guests. 35 of the guests are male.	
(a) Work out 35 out of 56 as a percentage.	
%	
40% of the 35 male guests wear glasses. (2)	
(b) Write the number of male guests who wear glasses as a fraction of the 56 guests. Give your answer in its simplest form.	
(4)	Q8
(Total 6 marks)	

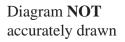
<b>a</b> ( ) G: 1:G	0 4		Leave blank
9. (a) Simplify	8x - 4x		
		(1)	
		(1)	
(b) Simplify	$y \times y \times y$		
		(1)	
(c) Simplify	4x + 3y - 2x + 5y		
			Q9
		(Total 4 marks)	
		(20002 1 22202 222)	

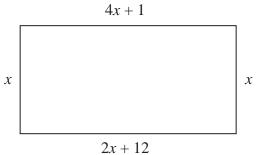
**10.** The two-way table gives some information about how 100 children travelled to school one day.

	Walk	Car	Other	Total
Boy	15		14	54
Girl		8	16	
Total	37			100
(a) Complete the	e two-way table.			
(w) <b>F</b>				(2
				(3
One of the childr	en is picked at ra	ndom.		
(b) Write down	the probability th	at this child walk	ed to school that d	ay.
			******	(1
				(1
One of the girls i	s picked at rando	m.		1)
	s picked at rando		walk to sahool that	
			walk to school that	
			valk to school that	
			walk to school that	
			walk to school that	day.
(c) Work out the	e probability that		walk to school that	day. (2
	e probability that		walk to school that	day. (2
(c) Work out the Compasses cost of Rulers cost r pen	e probability that to pence each.	this girl did <b>not</b> v	walk to school that	day. (2 (Total 6 marks)
(c) Work out the Compasses cost of Rulers cost r pen	e probability that to pence each.	this girl did <b>not</b> v		day. (2 (Total 6 marks)
(c) Work out the Compasses cost of Rulers cost r pen	e probability that to pence each.	this girl did <b>not</b> v		day. (2 (Total 6 marks)
(c) Work out the Compasses cost of Rulers cost r pen	e probability that to pence each.	this girl did <b>not</b> v		day. (2 (Total 6 marks)
(c) Work out the Compasses cost of Rulers cost r pen	e probability that to pence each.	this girl did <b>not</b> v	ce, of 2 compasses	day. (2 (Total 6 marks)

11.

**14.** 





The diagram shows a rectangle.

All the measurements are in centimetres.

(a) Explain why 4x + 1 = 2x + 12

(1)

(b) Solve 4x + 1 = 2x + 12

 $x = \dots$  (2)

(c) Use your answer to part (b) to work out the perimeter of the rectangle.

..... cm (2)

Q14

(Total 5 marks)

<b>15.</b> (a)	Simplify	5bc + 2bc - 4bc	Leave blank
(b)	Simplify	4x + 3y - 2x + 2y $(1)$	
(c)	Simplify	$m \times m \times m$ (2)	
(d)	Simplify	$3n \times 2p$ (1)	
(e)	Factorise	5m + 10(1)	
		(1) (Total 6 marks)	Q15

