	JNIVERSITY OF CAMBRIDGE INTERI nternational General Certificate of Seco	NATIONAL EXAMINATIONS	MAN Papacanbr
CANDIDATE NAME			
CENTRE UMBER		CANDIDATE NUMBER	
MATHEMATICS			0580/13
Paper 1 (Core)			May/June 2012
			1 hour
Candidates ansv	ver on the Question Paper.		
Additional Materi	als: Electronic calculator Mathematical tables (optional)	Geometrical instruments Tracing paper (optional)	

## READ THESE INSTRUCTIONS FIRST

Write your Centre number, candidate number and name on all the work you hand in.

Write in dark blue or black pen.

You may use a pencil for any diagrams or graphs.

Do not use staples, paper clips, highlighters, glue or correction fluid.

DO NOT WRITE IN ANY BARCODES.

Answer **all** questions.

If working is needed for any question it must be shown below that question.

Electronic calculators should be used.

If the degree of accuracy is not specified in the question, and if the answer is not exact, give the answer to three significant figures. Give answers in degrees to one decimal place. For  $\pi$ , use either your calculator value or 3.142.

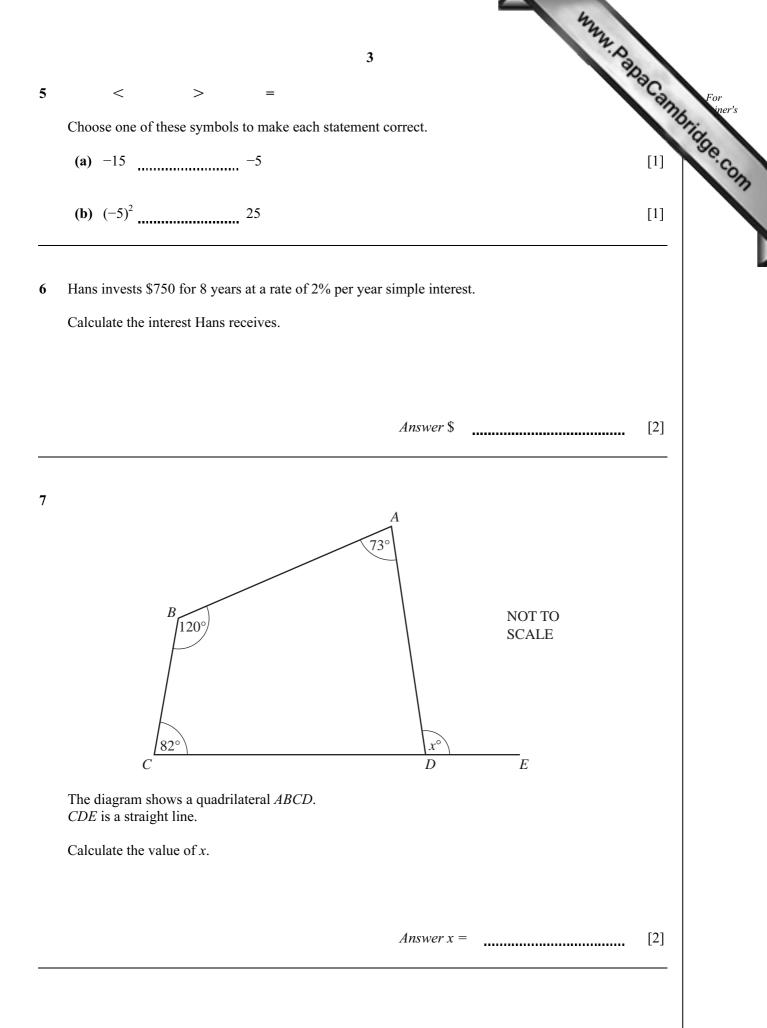
At the end of the examination, fasten all your work securely together.

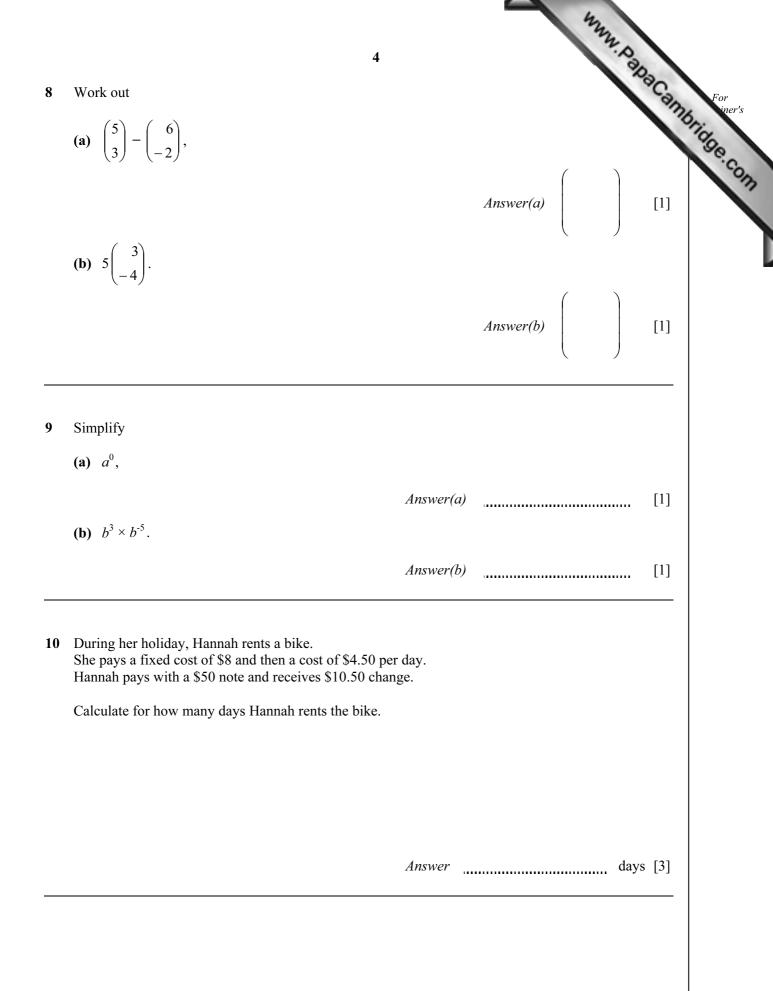
The number of marks is given in brackets [] at the end of each question or part question. The total of the marks for this paper is 56.

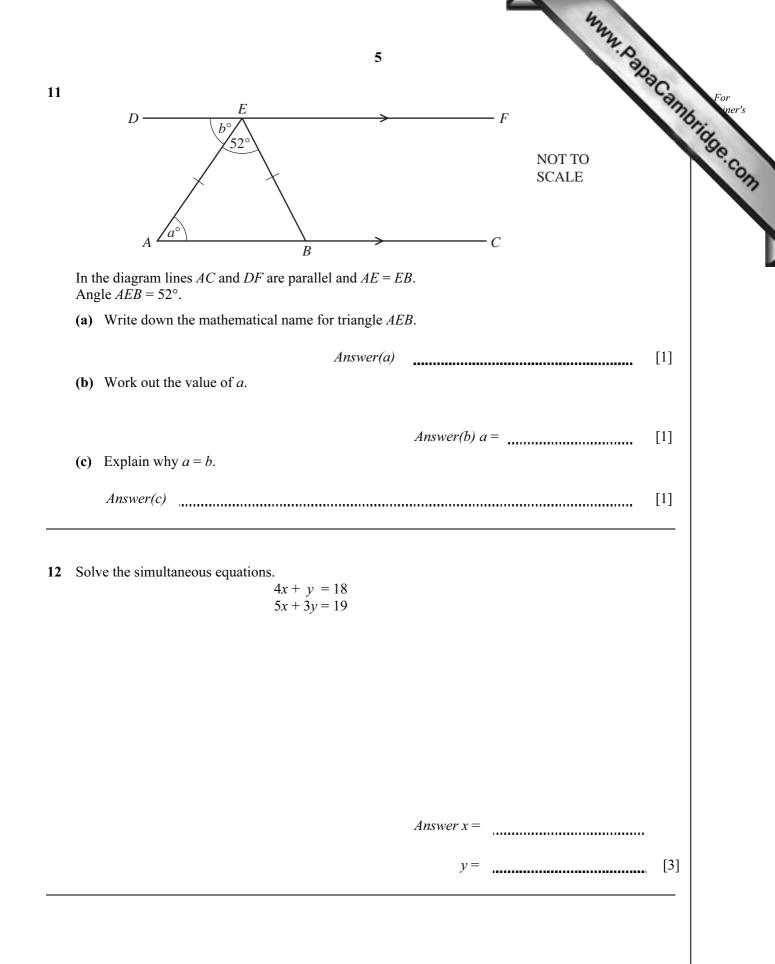
This document consists of **10** printed pages and **2** blank pages.



1	2 Write $\frac{2}{5}$ as a percentage.	Answer%[1]	For iner's
2	Change 5.2 square metres into square centimetres.		
		Answer cm <sup>2</sup> [1]	
3	Mohinder changes \$240 into Rupees. The exchange rate is \$1 = 46.2875 Rupees. Calculate how many Rupees he receives.		
		Answer Rupees [1]	
4	(a) Write down the next prime number after 47.		
	<b>(b)</b> Write down the next square number after 49.	Answer(a) [1]	
		Answer(b) [1]	

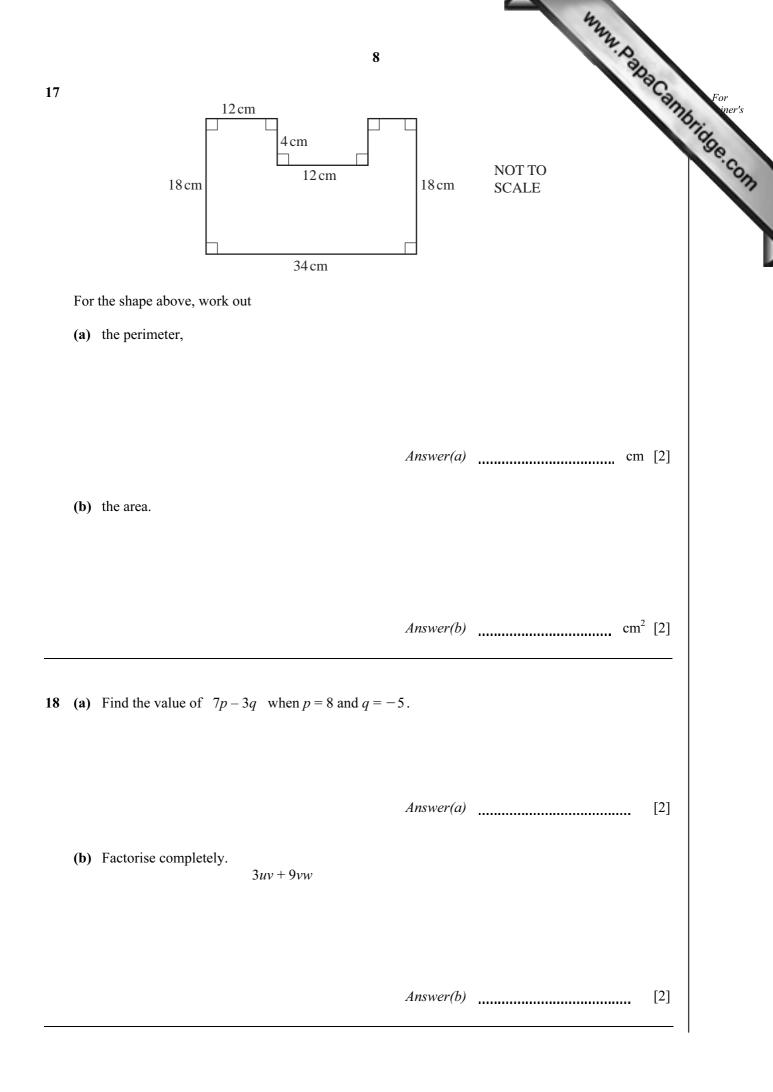


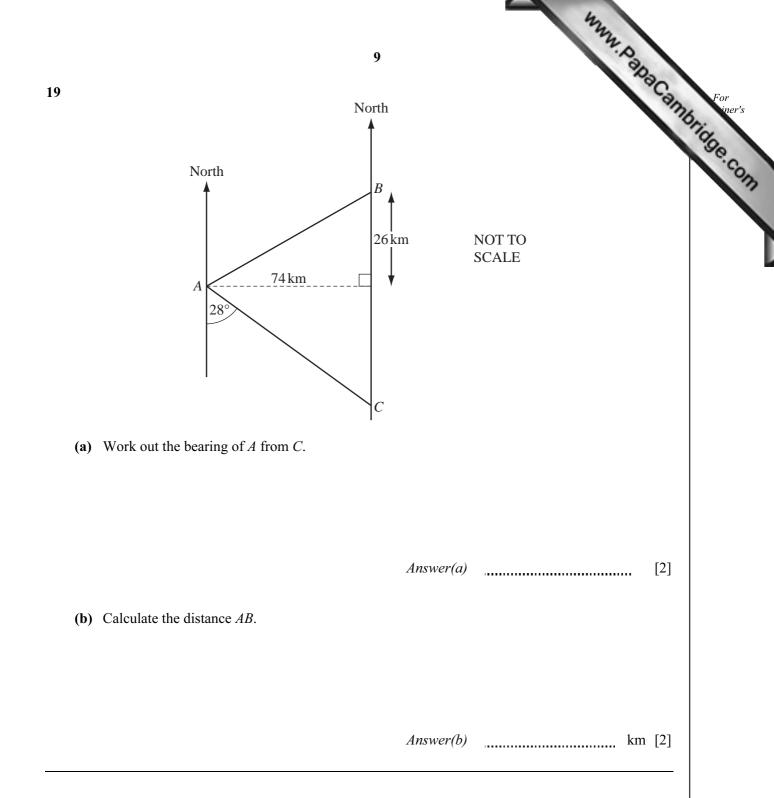




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13			00064 in sta e, writing th			andare	d form	1.	Inswer(	(a)	Anny Par	[1]
								<u>8.18</u> 5.84				
								Ŀ	Inswer(	Ъ)		[2]
14				,	7	3	8	2	5	1		
				:	5	3			2	3		
	For	the numb	ers above w	vork out th	e							
	(a)	mode,										
								Ŀ	Inswer(	(a)		[1]
	(b)	median,										
								Ŀ	Inswer(	b)		[2]
	(c)	range.										
								Ŀ	1nswer(	(c)		[1]

15	7 Without using your calculator, work out the following the stars of neuronalized and size each of the stars	ing.	Da Cambridge
	Show all the steps of your working and give each ar (a) $\frac{11}{12} - \frac{1}{3}$	nswer as a fraction in its simplest form.	nbridge.
	<b>(b)</b> $\frac{1}{4} \div \frac{11}{13}$	Answer(a)	[2]
16	(a) Solve the equation $5(x-3) = 21$ .	Answer(b)	[2]
	<b>(b)</b> Make <i>x</i> the subject of the equation $y = 3x - 2$ .	Answer(a) x =	[2]
		Answer(b) x =	[2]





**20 (a)** Colin has some seeds. The probability a seed will grow is 0.85.

Find the probability that a seed will **not** grow.

Answer(a) [1]

(b) Richard grows flowers.Some of his flowers are chosen at random.The colours are recorded in the table below.

Colour of flower	Frequency	Relative Frequency
Red	20	0.16
Blue	15	
Yellow	35	
Other	55	

(i) Complete the table to show the relative frequency of each colour.

. . .

(ii) Richard grows 800 flowers in total.

Estimate how many of these flowers are red.

Answer(b)(ii) [2]

[2]



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