

Centre No.						Paper Reference						Surname	Initial(s)	
Candidate No.						1	3	8	0	/	4	H	Signature	

Paper Reference(s)

1380/4H

Edexcel GCSE

Mathematics (Linear) – 1380

Paper 4 (Calculator)

Higher Tier

Friday 12 November 2010 – Morning

Time: 1 hour 45 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, calculator. 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 28 questions in this question paper. The total mark for this paper is 100.

There are 28 pages in this question paper. Any blank pages are indicated.

Calculators may be used.

If your calculator does not have a π button, take the value of π to be 3.142 unless the question instructs otherwise.

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

<http://bland.in>

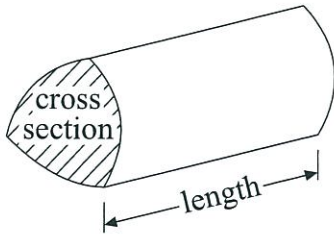
Turn over

GCSE Mathematics (Linear) 1380

Formulae: Higher Tier

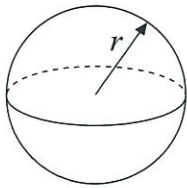
You must not write on this formulae page.
Anything you write on this formulae page will gain NO credit.

Volume of a prism = area of cross section \times length



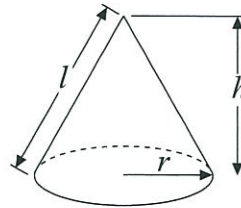
Volume of sphere = $\frac{4}{3}\pi r^3$

Surface area of sphere = $4\pi r^2$

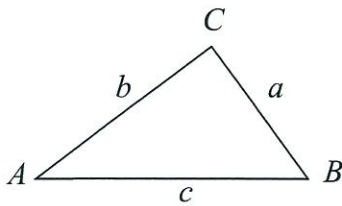


Volume of cone = $\frac{1}{3}\pi r^2 h$

Curved surface area of cone = $\pi r l$



In any triangle ABC



The Quadratic Equation

The solutions of $ax^2 + bx + c = 0$

where $a \neq 0$, are given by

$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

Sine Rule $\frac{a}{\sin A} = \frac{b}{\sin B} = \frac{c}{\sin C}$

Cosine Rule $a^2 = b^2 + c^2 - 2bc \cos A$

Area of triangle = $\frac{1}{2} ab \sin C$



Answer ALL TWENTY EIGHT questions.

Write your answers in the spaces provided.

You must write down all stages in your working.

1.

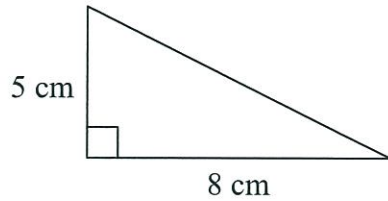


Diagram NOT accurately drawn

Work out the area of this right-angled triangle.

$$\frac{5(8)}{2} = \frac{40}{2} = 20 \text{ cm}^2$$

.....20..... cm²
(Total 2 marks)

Q1

2. A spinner can land on red or blue or pink.

The table shows the probabilities that the spinner will land on red or on blue.

Colour	red	blue	pink
Probability	0.58	0.30	

Work out the probability that the spinner will land on pink.

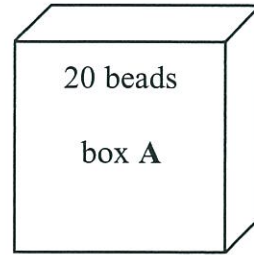
$$P(\text{pink}) = 1 - (0.58 + 0.3) = 1 - 0.88 = 0.12$$

.....0.12.....
(Total 2 marks)

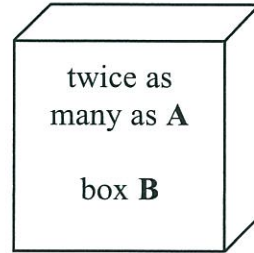
Q2



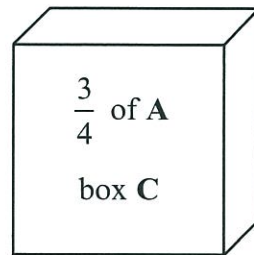
3. There are 20 beads in box A.



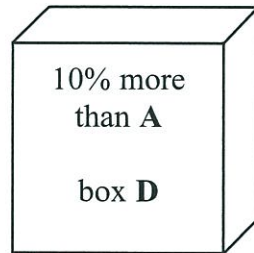
In box B there are twice as many beads as in box A.



In box C there are $\frac{3}{4}$ of the number of beads as in box A.



In box D there are 10% more beads than in box A.



Work out the **total** number of beads in the four boxes.

Box A — 20

Box B — 40

Box C — $\frac{3}{4} \times 20 = 15$

Box D — $20 + (10\% \text{ of } 20) = 22$

Total = $20 + 40 + 15 + 22 = 97$

..... 97 beads

(Total 4 marks)

Q3

