

**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 may be used.** 

If your calculator does not have a  $\pi$  button, take the value of  $\pi$  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 Compiled by Peter Bland



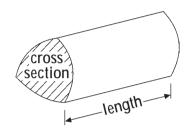


## **GCSE Mathematics (Linear) 1380**

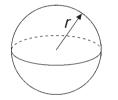
Formulae: Higher Tier

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

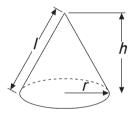
Volume of a prism = area of cross section × length



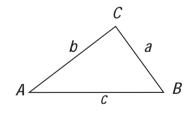
Volume of sphere  $=\frac{4}{3}\pi r^3$ Surface area of sphere =  $4\pi r^2$ 



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



In any triangle ABC



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  $=\frac{1}{2}ab\sin C$ 

The Quadratic Equation The solutions of  $ax^2 + bx + c = 0$ where  $a \neq 0$ , are given by

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



