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

Paper Reference(s)

**1380/4H**

Examiner's use only

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Team Leader's use only

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# Edexcel GCSE

## Mathematics (Linear) – 1380

Paper 4 (Calculator)

# Pythagoras

Past Paper Questions

Arranged by Topic

**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 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 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.



N 3 4 7 3 1 A 0 1 2 4

*Turn over*

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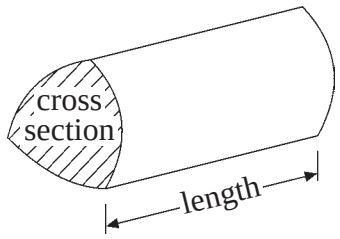
**GCSE Mathematics (Linear) 1380**

Formulae: Higher Tier

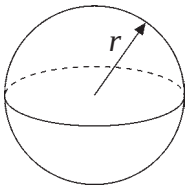
**You must not write on this formulae page.**
**Anything you write on this formulae page will gain NO credit.**

**Volume of a prism** = area of cross section × length



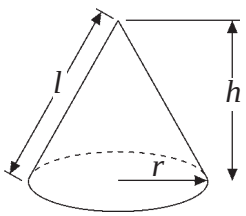

**Volume of sphere** $= \frac{4}{3}\pi r^3$

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

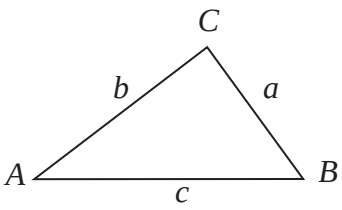



**Volume of cone** $= \frac{1}{3}\pi r^2 h$

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




**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

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

Leave blank

**1.**

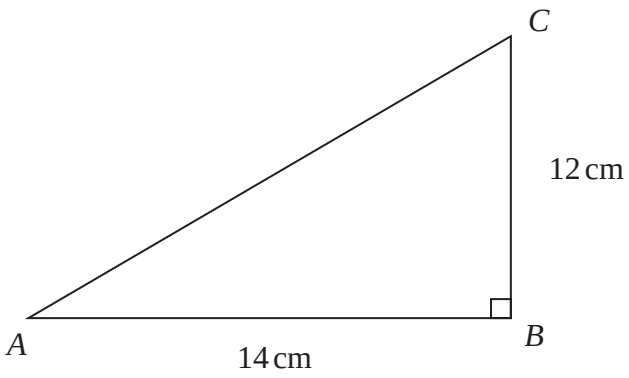



Diagram **NOT** accurately drawn

*ABC* is a right-angled triangle.
*AB* = 14 cm.
*BC* = 12 cm.

Calculate the length of *AC*.
Give your answer correct to 3 significant figures.

..... cm

**Q16**

**(Total 3 marks)**

Leave blank

**2.**

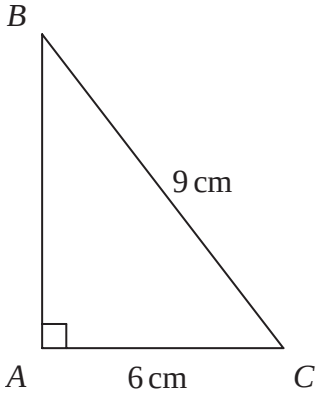



Diagram **NOT** accurately drawn

*ABC* is a right-angled triangle.

*AC* = 6 cm.
*BC* = 9 cm.

Work out the length of *AB*.
Give your answer correct to 3 significant figures.

..... cm

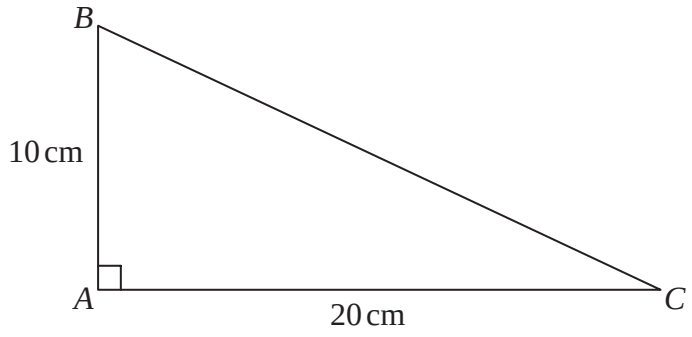
**(Total 3 marks)**

**Q17**

Leave blank

**3.**

Diagram **NOT** accurately drawn




In triangle *ABC*,

*AB* = 10 cm
*AC* = 20 cm
angle *BAC* = 90°

Work out the length of *BC*.
Give your answer correct to 3 significant figures.
You must state the units in your answer.

..... .....

**Q16**

**(Total 4 marks)**

Leave blank

**4.**

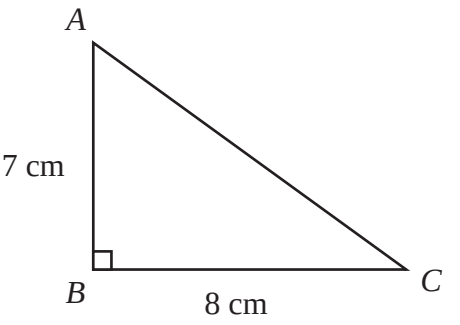



Diagram **NOT** accurately drawn

*ABC* is a right-angled triangle.
*AB* = 7 cm,
*BC* = 8 cm.

(a) Work out the area of the triangle.

..... $cm^2$
**(2)**

(b) Work out the length of *AC*.
Give your answer correct to 2 decimal places.

..... cm
**(3)**