

Non calculator:

Express $x^2 - 14x + 44$ in the form $(x - a)^2 + b$.

2

Calculator:

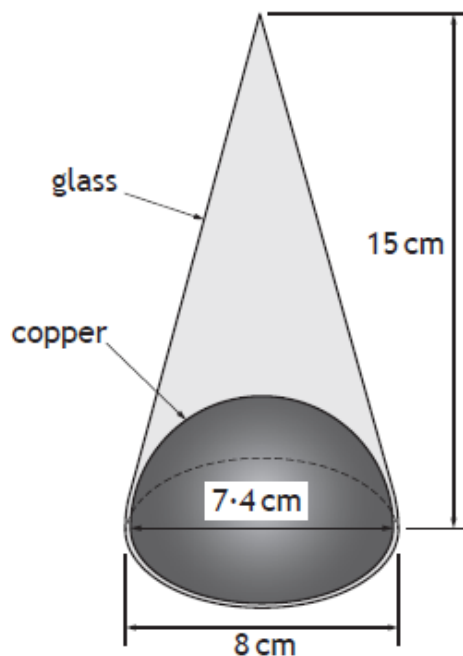
Simplify $\frac{n^5 \times 10n}{2n^2}$.

3

Challenge Question (calculator):

An ornament is in the shape of a cone with diameter 8 centimetres and height 15 centimetres.

The bottom contains a hemisphere made of copper with diameter 7.4 centimetres. The rest is made of glass, as shown in the diagram below.



Calculate the volume of the glass part of the ornament.

Give your answer correct to 2 significant figures.

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