26 A solid cone is joined to a solid hemisphere to make the solid shown below.

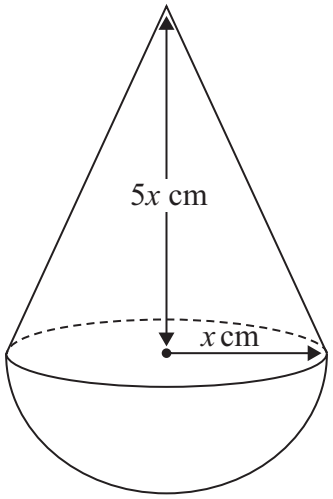


Diagram **NOT** accurately drawn

The cone is made from copper.
The density of copper is $9\,g/cm^3$

The hemisphere is made from a different metal.

The total mass of the solid is 4752π grams
The total volume of the solid is $504\pi\,cm^3$

Work out the density of the hemisphere.
Show your working clearly.

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..... g/cm^3

(Total for Question 26 is 6 marks)

TOTAL FOR PAPER IS 100 MARKS

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