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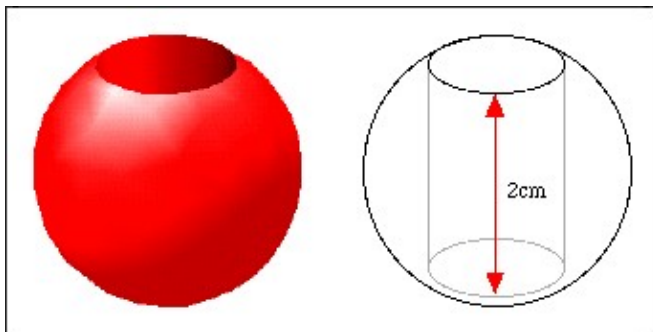
January 1997

Regulars

## Puzzle page



The PASS Maths logo depicts a sphere 'pierced' by a cylinder embossed with the words *PASS Maths*. Our first puzzle concerns just such a shape, here referred to as *The Ring*.



A ring is made from a solid sphere by drilling out a cylindrical hole through the sphere's centre. The axis of the cylinder goes through the centre of the sphere. When the ring is stood on a flat surface, it is exactly 2cm high. The question is, what is the volume of the solid material of the ring in cubic centimeters? You are also told that you have enough information to solve this problem.

We will publish the best solutions in the next issue, along with the answer to the problem itself.

Please submit your answer, with explanation, to [Any comments?](#)

## Solution

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*Plus* is part of the family of activities in the Millennium Mathematics Project, which also includes the [NRICH](#)

Puzzle page  
and MOTIVATE sites.