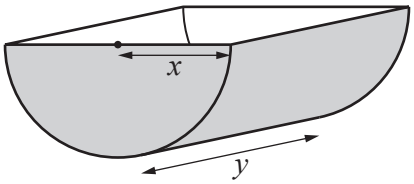
12 In this question all lengths are in centimetres.



A container is a half-cylinder, open as shown. It has length y and uniform cross-section of radius x. The volume of the container is 25 000. Given that x and y can vary and that the outer surface area, S, of the container has a minimum value, find this value. [8]

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