

8 The volume of a sphere is 500 cm^3

(a) Calculate the radius, in cm to 3 significant figures, of the sphere.

(2)

The surface area of the sphere is increased by 20 cm^2

(b) Using calculus, find an estimate for the increase in the radius, in cm to 2 significant figures, of the sphere.

(5)

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Question 8 continued

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(Total for Question 8 is 7 marks)



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