Volume of a Solid
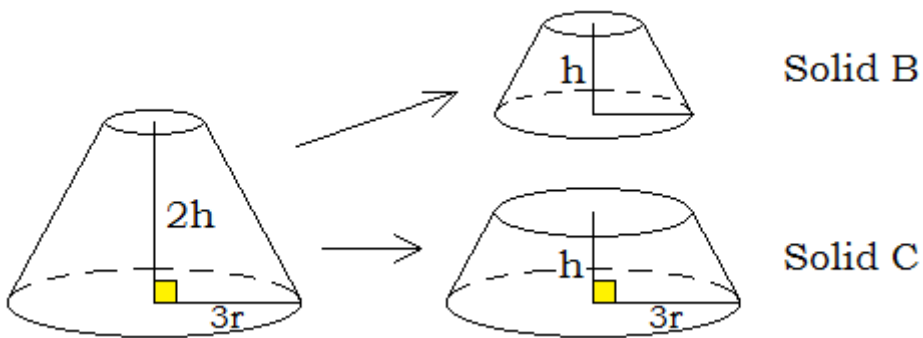
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A solid cone of perpendicular height 3h and base radius 3r is cut into three parts as follows.

Firstly, a cone of perpendicular height h and base radius r is cut off the top of cone.
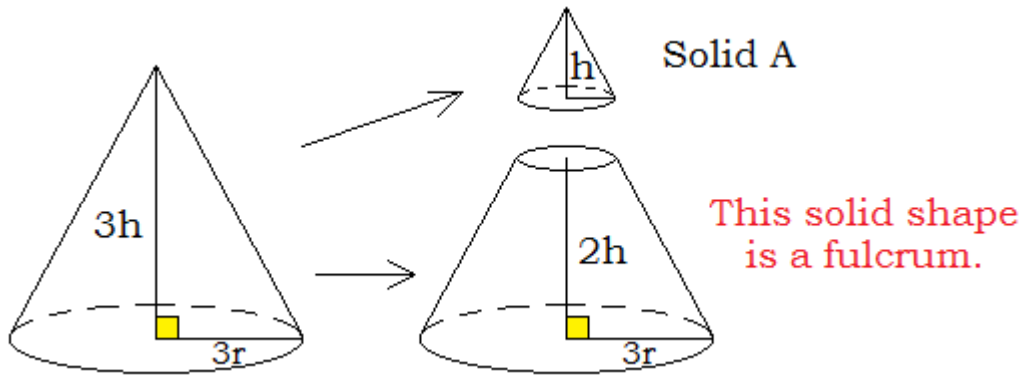
Then a cut is made a right-angles to the axis of the fulcrum so that the perpendicular height of each solid is h.

Find, in its simplest form;

volume of shape A   :   volume of shape B   :   volume of shape C

The answer follows on the next page …

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Answer: volume of shape A : volume of shape B : volume of shape C

=   1   :   7   :   19