Assignment

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Given ,
Radius of the cylinder(R)=3 cm
Height of the cylinder(H)= 7 cm
Height of the cone removed(h)=3 cm
Volume of cylinder(V_1) =π R^2H
$Volume of hemisphere(V_2) = \frac{2}{3}\pi$ R^3
$Volume of Cone(V_3) = \frac{1}{3}\pi$ R^2h
$According to question Hemisphere, Cone are removed from Cylinder$
$Therefore, remaining volume = V_1 - V_2 - V_3$
=π R^2 $H - \frac{2}{3}\pi$ $R^3 - \frac{1}{3}\pi$ R^2h
$Substituting given values we get$
= $113.142 cm^3$