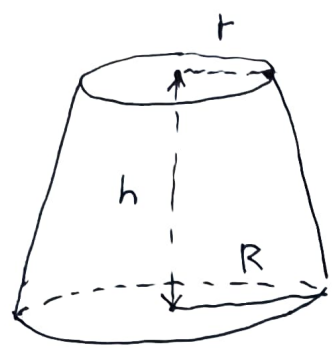


6.2 translating volumes into x-y plane diagrams

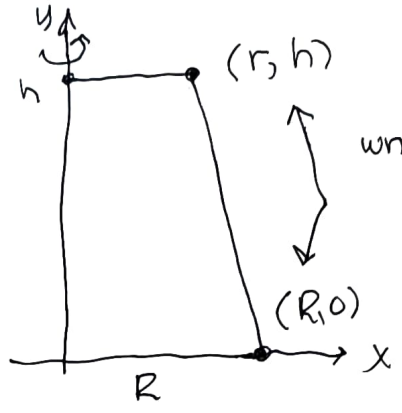
(2)

example 6.2.48

Find the volume of a "frustum" of a right circular cone with height h , lower base radius R and top radius r .



Bob hint:



write eqn for line through these 2 points.

Now you try this.

Set up integral but let Maple evaluate it AND simplify it.
 Does your result have the two limiting cases $r=0 \rightarrow V = \text{cone formula}$
 and $h=0 \rightarrow V=0$?
 [What about the case $r=R$ making this a cylinder?]