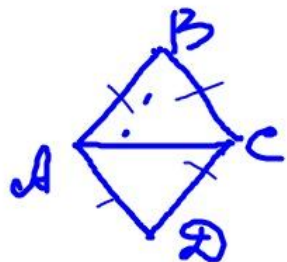


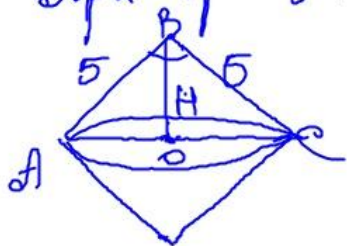
Задача №6



$ABCD$ - ромб.
 $AB=BC=AD=DC=5$
 $\angle B=60^\circ$

Найти: $V_{вр} = ?$ $S_{вр} = ?$

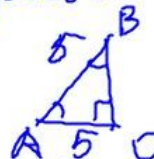
При вращении



$S_{т.вр} = 2 \cdot \pi \cdot R \cdot l$

$\triangle ABC$ - равност.

$R = \frac{5}{2}$



$OB = H$



$\Rightarrow AC = 2R = 5$

$H^2 + \left(\frac{5}{2}\right)^2 = 5^2$

$H^2 = \frac{75}{4} \Rightarrow H = \frac{5\sqrt{3}}{2}$

$V_{т.вр} = \frac{2}{3} \cdot \pi \cdot \left(\frac{5}{2}\right)^2 \cdot \frac{5\sqrt{3}}{2} = \frac{75\sqrt{3}\pi}{12}$

$S_{т.вр} = 2\pi \cdot \frac{5}{2} \cdot 5 = 25\pi$