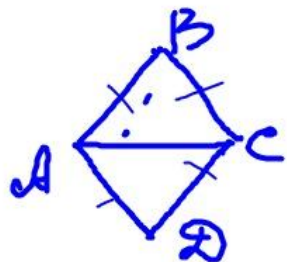


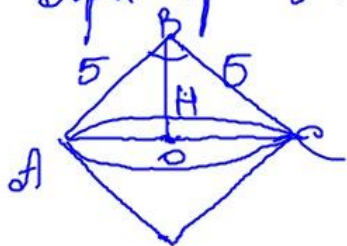
### Задача №6



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

Найти:  $V_{вр} = ?$   $S_{вр} = ?$

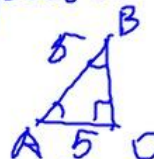
При вращении



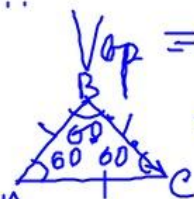
$$S_{т.вр} = 2 \cdot \pi \cdot R \cdot l$$

$\triangle ABC$  - равност.

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



$$OB = H$$



$$\Rightarrow AC = 2R = 5$$

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

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

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

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