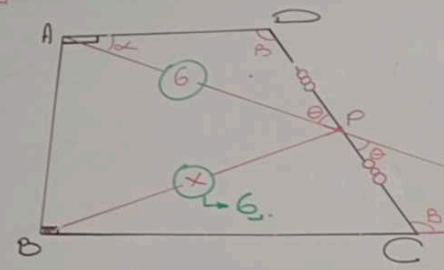
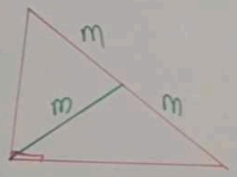


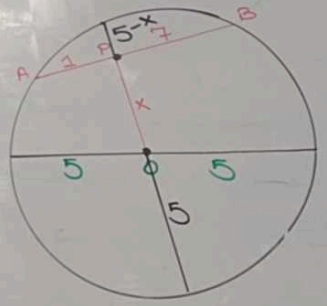


$1.7 = (5-x)(5+x)$

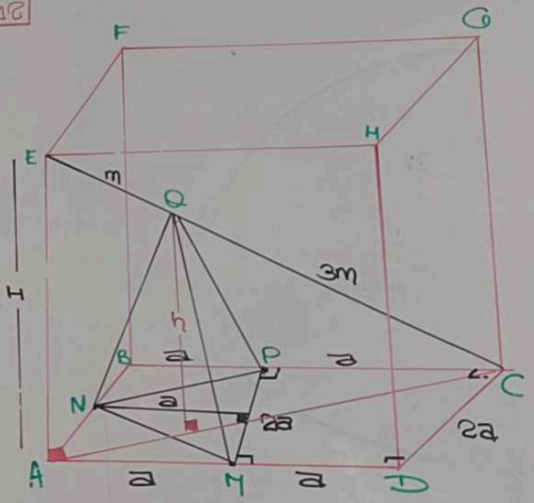
$7 = 25 - x^2$

$x^2 = 18$

$x = 3\sqrt{2}$



18



$\frac{3m}{7} = \frac{4m}{H}$

$\frac{H}{7} = \frac{4}{3}$

20

$\frac{3m}{\eta} = \frac{4m}{H}$

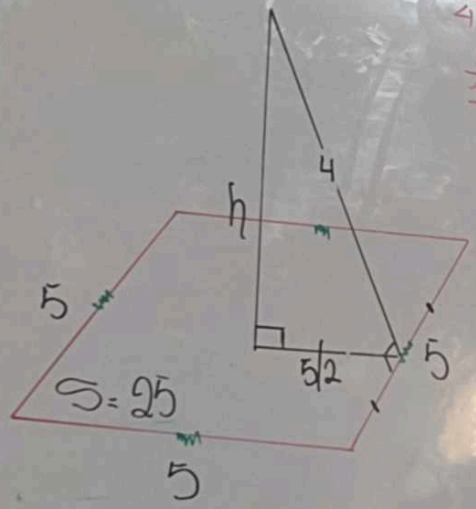
$\frac{H}{\eta} = \frac{4}{3}$

$\frac{\frac{a^2\sqrt{3}}{4} \cdot \frac{h}{3}}{\frac{(2a)^2\sqrt{3}}{4} \cdot H} = \frac{a^2}{3} \times \frac{h}{H}$

$\frac{1}{16} \times \frac{3}{4}$

$\frac{1}{16}$

02



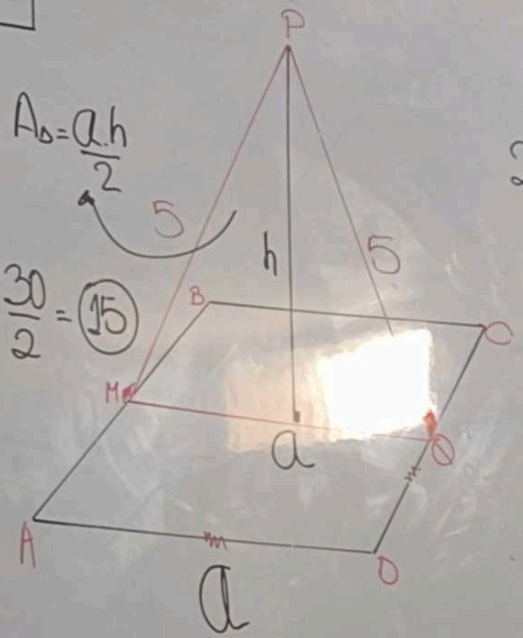
$16 = \frac{25}{4} + h^2$

$\frac{39}{4} = h^2$

$h = \frac{\sqrt{39}}{2}$

$V = \frac{5 \times h}{3} = \frac{25}{3} \cdot \frac{\sqrt{39}}{2} = \frac{25\sqrt{39}}{6}$

□



$A_\Delta = \frac{a.h}{2}$

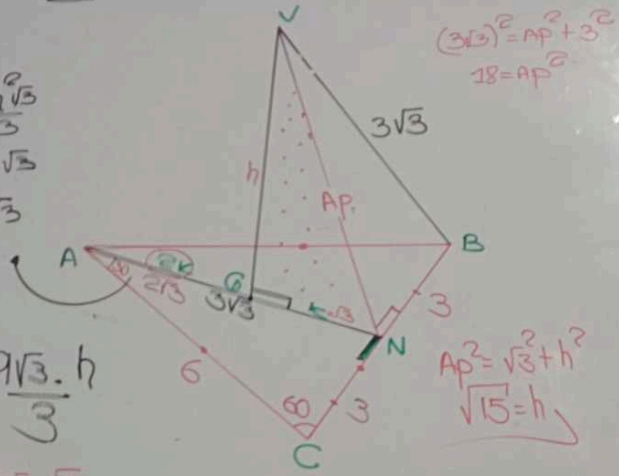
$\frac{30}{2} = 15$

$\underbrace{A_{SL}}_{} = V$

$2 \cdot 15 = \frac{a^2.h}{3}$

$30 = ah$

4



$S = \frac{h^2\sqrt{3}}{3}$

$S = \frac{27}{3}\sqrt{3}$

$S = 9\sqrt{3}$

$(3\sqrt{3})^2 = Ap^2 + 3^2$

$18 = Ap^2$

$Ap^2 = \sqrt{3}^2 + h^2$

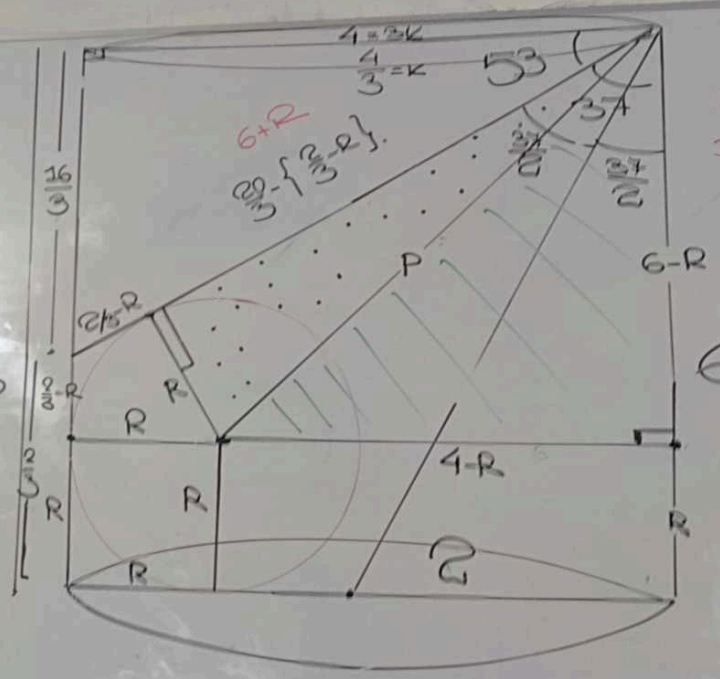
$\sqrt{15} = h$

$V = \frac{9\sqrt{3}.h}{3}$

$3\sqrt{3}.\sqrt{15}$

$3\sqrt{45}$

$9\sqrt{5}$



$AS_T = 2\pi R(g+R)$

$32\pi = 2\pi(2)(g+2)$

$g = 6$

$$r^2 = (6+R)^2 + R^2 \quad | \quad r^2 = (6-R)^2 + (4-R)^2$$

46

$$\cancel{36} + 12R + \cancel{R^2} + \cancel{R^2} = \cancel{36} - 12R + \cancel{R^2} + \cancel{16} - 8R + \cancel{R^2}$$

$$32R = 16$$

$$R = \frac{1}{2}$$

$$V = \frac{4}{3}\pi R^3 = \frac{\cancel{4}}{3}\pi \frac{1}{\cancel{8}_2} = \boxed{\frac{\pi}{6}}$$

$AS_T = 2\pi R(g+R)$

$32\pi = 2\pi(2)(g+2)$

$g = 6$

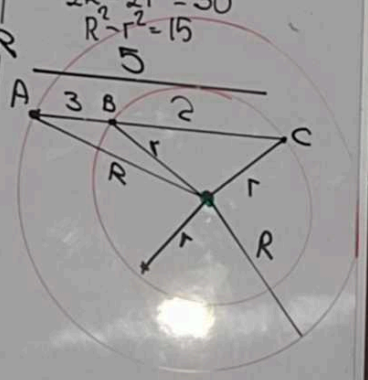
$6-R$

6

$r^2(3) + R^2(2) = r^2(5) + 30$

$2R^2 - 2r^2 = 30$

$R^2 - r^2 = 15$



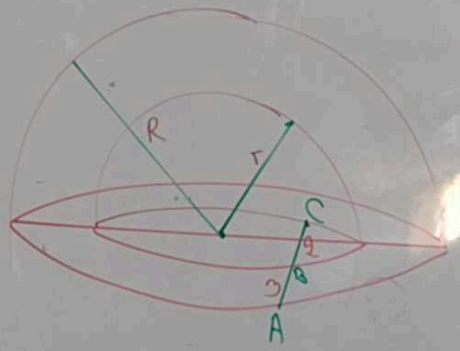
$P^2 = (6+R)^2 + R^2$ | $P^2 = (6-R)^2 + (4-R)^2$

$36 + 12R + R^2 + R^2 = 36 - 12R + R^2 + 16 - 8R + R^2$

$32R = 16$

$R = \frac{1}{2}$

$V = \frac{4}{3}\pi R^3 = \frac{4}{3}\pi \frac{1}{8} = \frac{\pi}{6}$



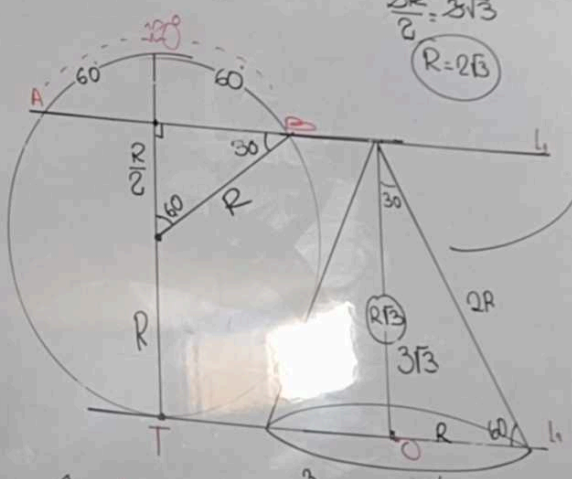
$2\pi R^2 - 2\pi r^2$

$2\pi(R^2 - r^2)$

$2\pi(15)$

30π

46



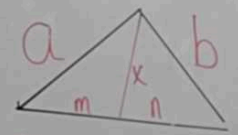
$\frac{3R}{2} = 3\sqrt{3}$

$R = 2\sqrt{3}$

$V = 9\sqrt{3}\pi$

$\frac{\pi R^2 \cdot R\sqrt{3}}{3} = 9\sqrt{3}\pi$

$R = 3$



$a^2 n + b^2 m = x^2 c + mnc$

$V = \frac{4}{3}\pi(2\sqrt{3})^3 = \frac{4}{3}\pi 8 \cdot 3\sqrt{3}$

$32\sqrt{3}\pi$