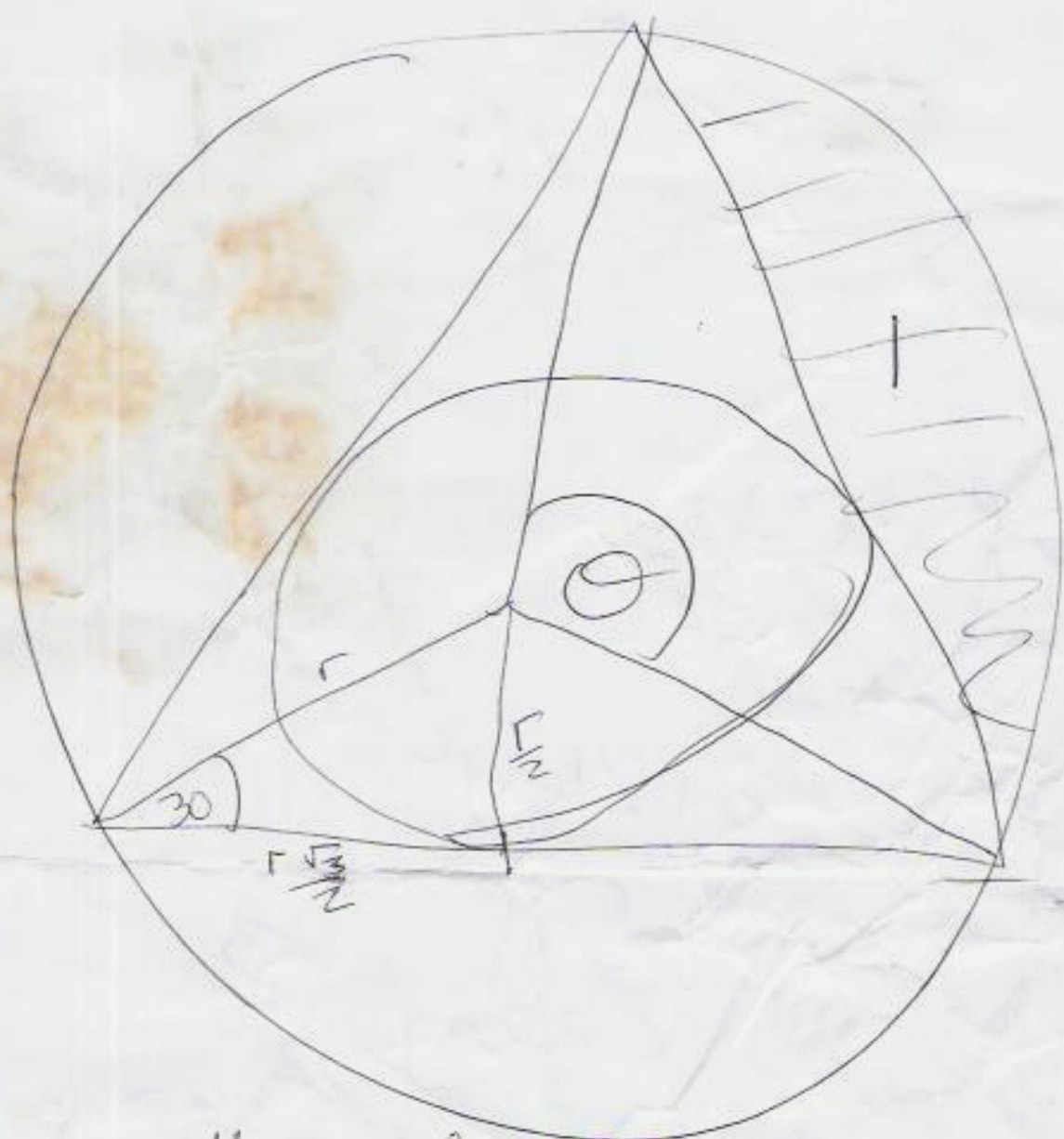


6)



$$\frac{\text{Area small circle}}{\text{Area large circle}} = \frac{\pi (r/2)^2}{\pi r^2} = \frac{1}{4}$$

ANS=4

$$\begin{aligned} \text{ii) Area 1 above} &= r^2(\theta - \sin\theta) \\ &= r^2\left(2\frac{\pi}{3} - \sin 2\frac{\pi}{3}\right) \\ &= r^2\left(2\frac{\pi}{3} - \frac{\sqrt{3}}{2}\right) \end{aligned}$$

$$\text{Area triangle} = \frac{1}{2} \left(\frac{r\sqrt{3}}{2}\right)^2 \times \sin 60 = \frac{3r^2\sqrt{3}}{4}$$