

$$\begin{aligned} \text{Area small region} &= \frac{3r^2\sqrt{3}}{4} \times \frac{1}{3} - \pi\left(\frac{r}{2}\right)^2 \times \frac{1}{3} \\ &= r^2 \left( \frac{\sqrt{3}}{4} - \frac{\pi}{12} \right) \end{aligned}$$

$\therefore$  larger : smaller

$$\cancel{r^2} \left( 2\frac{\pi}{3} - \frac{\sqrt{3}}{2} \right) : r^2 \left( \frac{\sqrt{3}}{4} - \frac{\pi}{12} \right)$$

$$\cancel{r^2} \left( 2\frac{\pi}{3} - \frac{\sqrt{3}}{2} \right) : \left( \frac{\sqrt{3}}{4} - \frac{\pi}{12} \right)$$

or  $(8\pi - 6\sqrt{3}) : (3\sqrt{3} - \pi)$

7)

