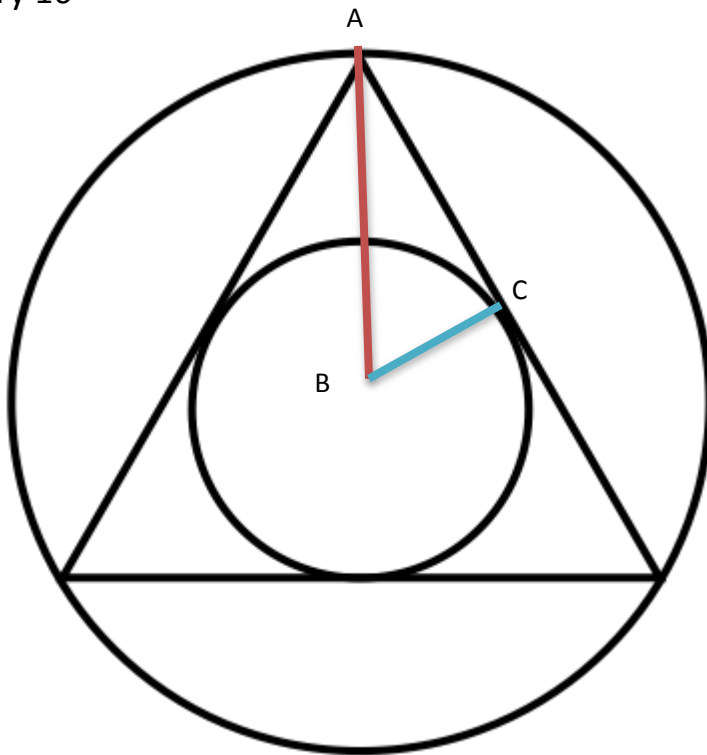


January 16th



In the triangle ABC:

$$\angle BCA = 90^\circ$$

$$\angle CAB = 60^\circ \div 2 = 30^\circ$$

$$\sin 30 = \frac{1}{2}$$

$$\text{so } CB = \frac{1}{2} \text{ of } AB$$

Hence if the small circle has area = πr^2

Then the large circle has area = $\pi \times (2r)^2 = 4 \pi r^2$

So the ratio of areas

$$\text{inscribed:circumscribed} = 1:4$$