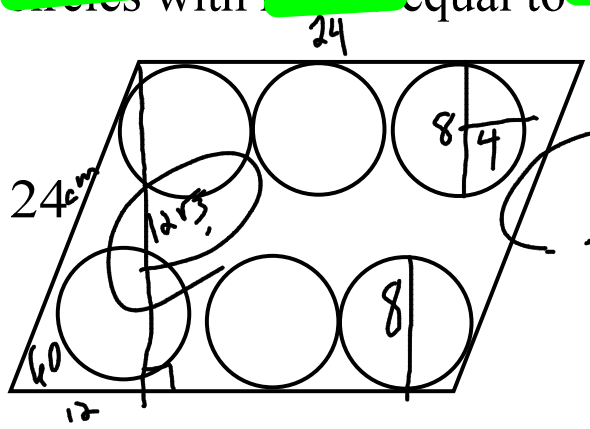
Find the probability that a point randomly picked in this [redacted] with a [redacted] angle will land on one of the [redacted] circles with [redacted] equal to [redacted]



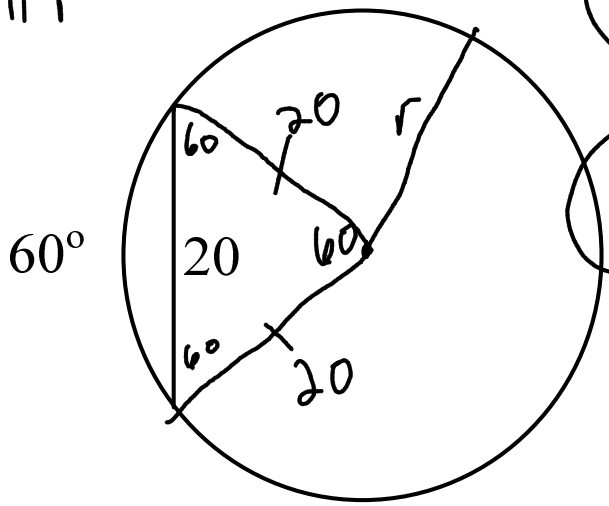
$$\frac{A(\text{circle})(6)}{A(\text{rhombus})}$$

$$\frac{16\pi \cdot 6}{24 \cdot 12\sqrt{3}}$$

$$= \frac{96\pi}{288\sqrt{3}} = \frac{\pi}{3\sqrt{3}} = .60$$

Find the area of this circle.

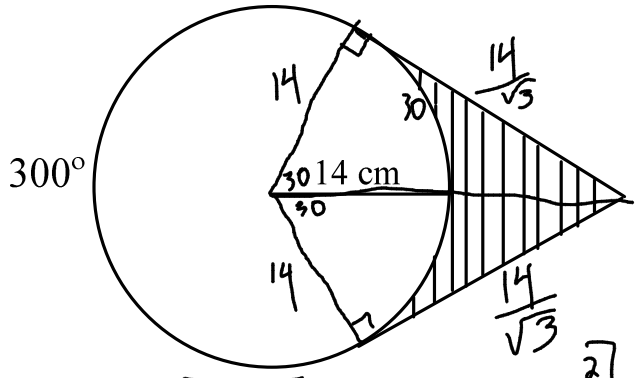
$A = \pi r^2$



$A = 400\pi$

1256.6

Find the area of the striped region.



$2\left[A_\Delta - A_{(sector)}\right] = 2\left[\frac{1}{2}14\cdot\frac{14}{\sqrt{3}} - \frac{1}{12}\pi 14^2\right]$

$= 2\left[\frac{98}{\sqrt{3}} - \frac{196}{12}\pi\right]$

$= 10.5$

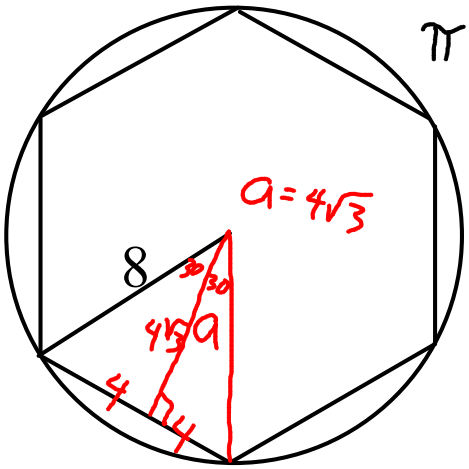
If a triangle with area 20 shares a base with triangle with area 140, what is the ratio of their heights?

If bases are equal, ratio of area = ratio of heights.

20:140

1:7

Find the area between the circle and the hexagon.



$A_{(o)} - A_{(hex)}$

$\pi 8^2 - \frac{1}{2} 48 \cdot 4\sqrt{3}$

$64\pi - 96\sqrt{3}$

$= 34.8$