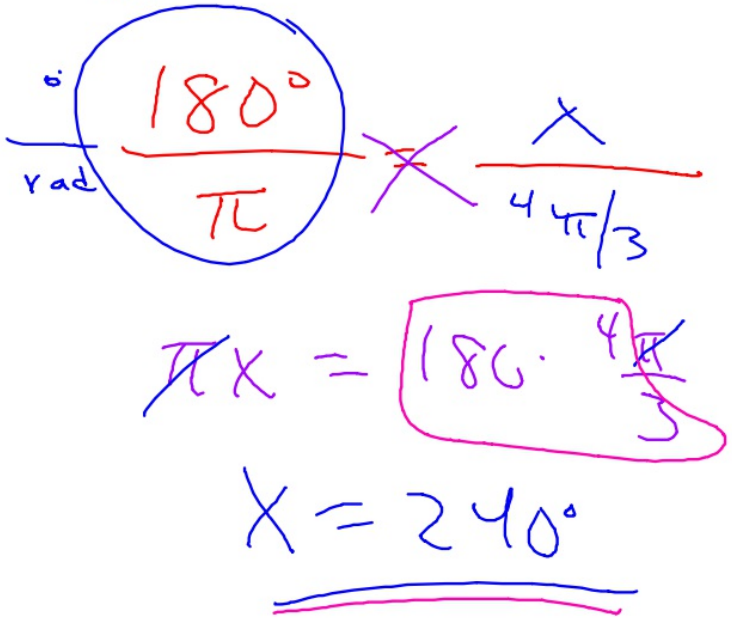
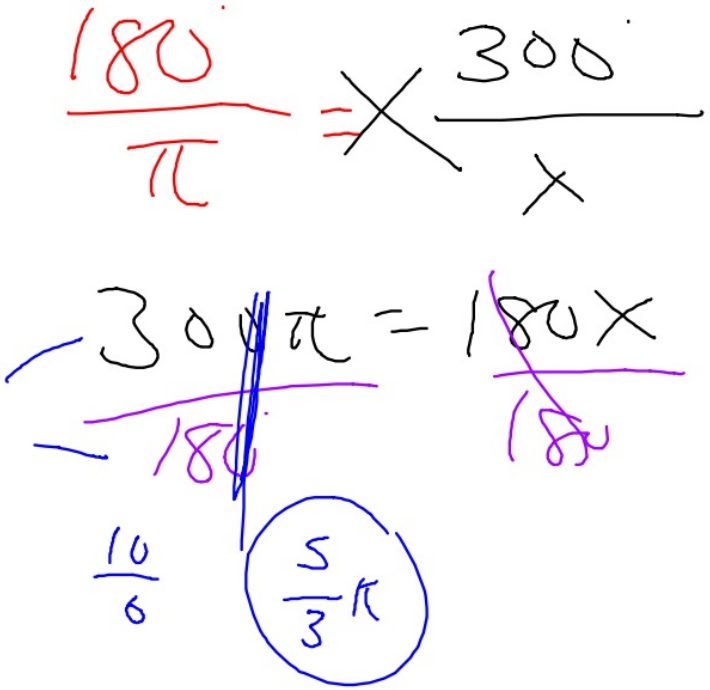
Good morning: warm up

Convert each to degrees or radians as appropriate.

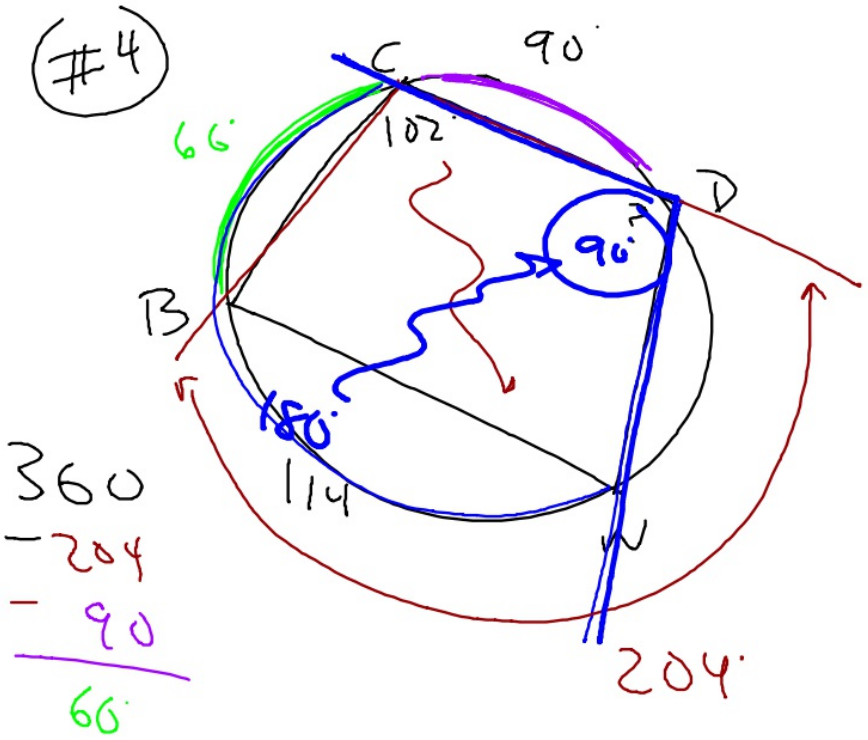
$4\pi/3$



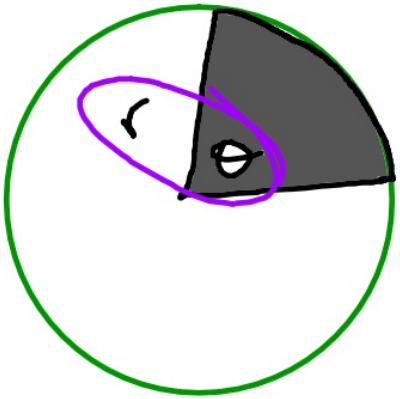
300°



take five minutes to study over hw to prepare for assessment



Sector Area: radians



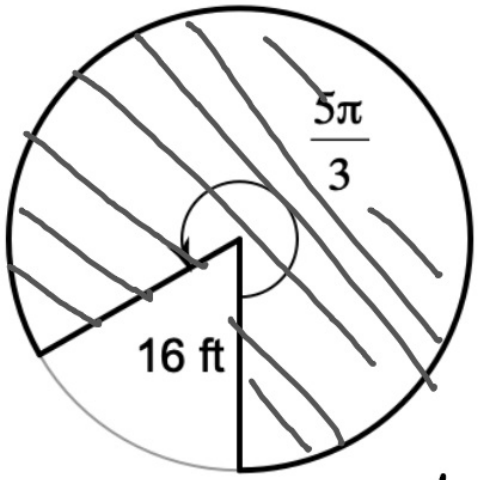
$$\frac{\theta}{2\pi} = \frac{SA}{\pi r^2} \quad *$$

$$\theta \cdot \pi r^2 = 2\pi \cdot SA$$

$$\theta \cdot r^2 = 2 \cdot SA$$

$$\frac{1}{2}\theta r^2 \rightarrow \boxed{\frac{1}{2} r^2 \cdot \theta}$$

Find the area

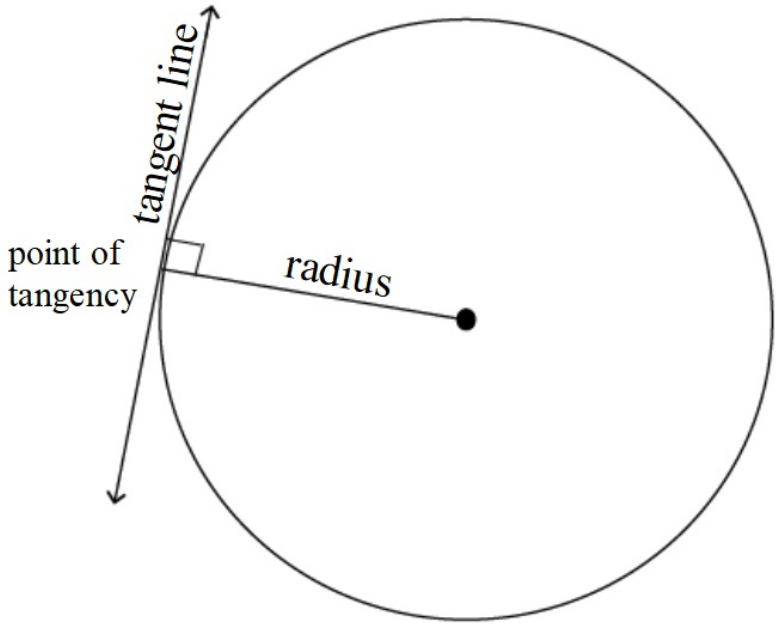


$\frac{1}{2}(16)^2 \cdot \frac{5\pi}{3}$

256

$128 \cdot \frac{5\pi}{3}$

$S = \frac{1}{2} r^2 \cdot \theta$

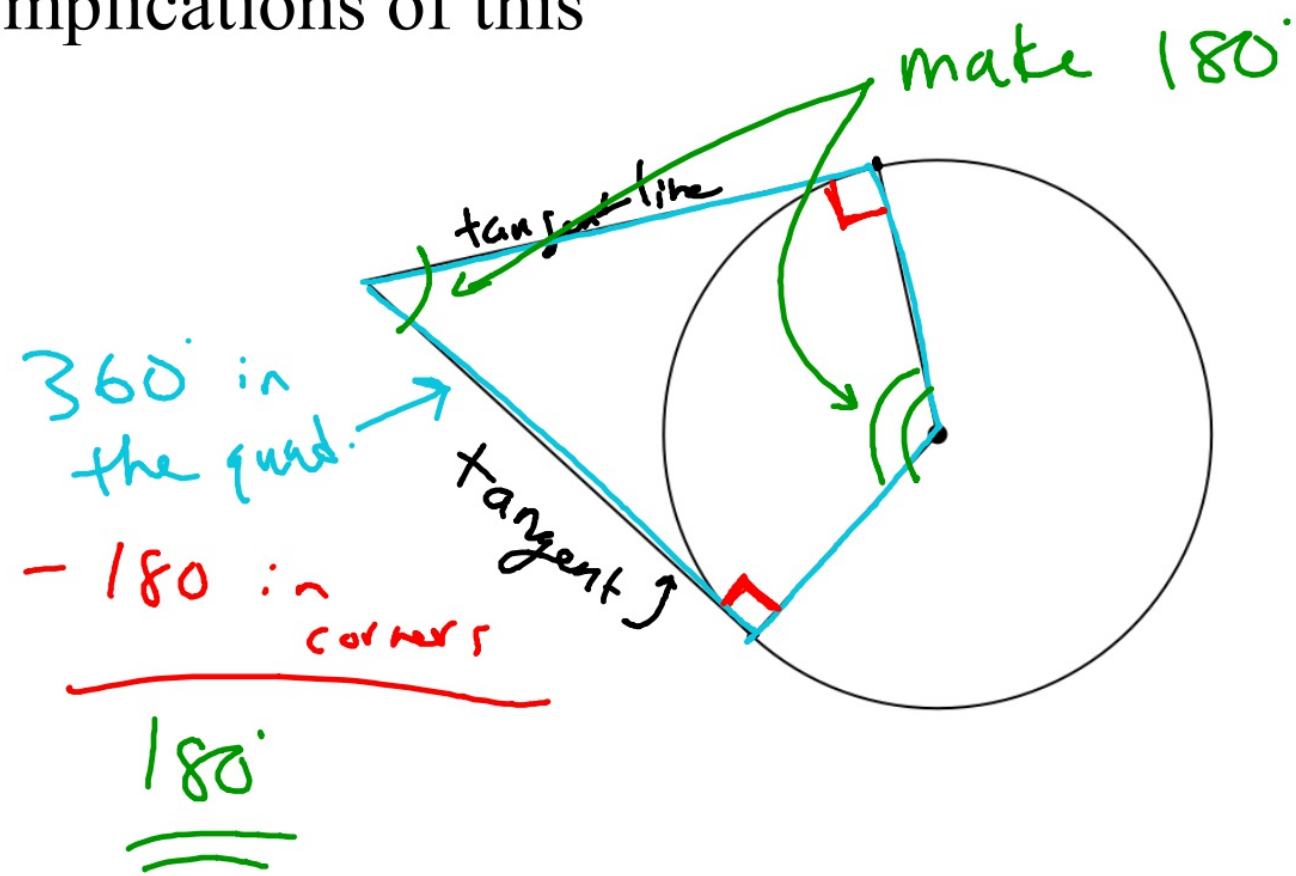


Why is this true?

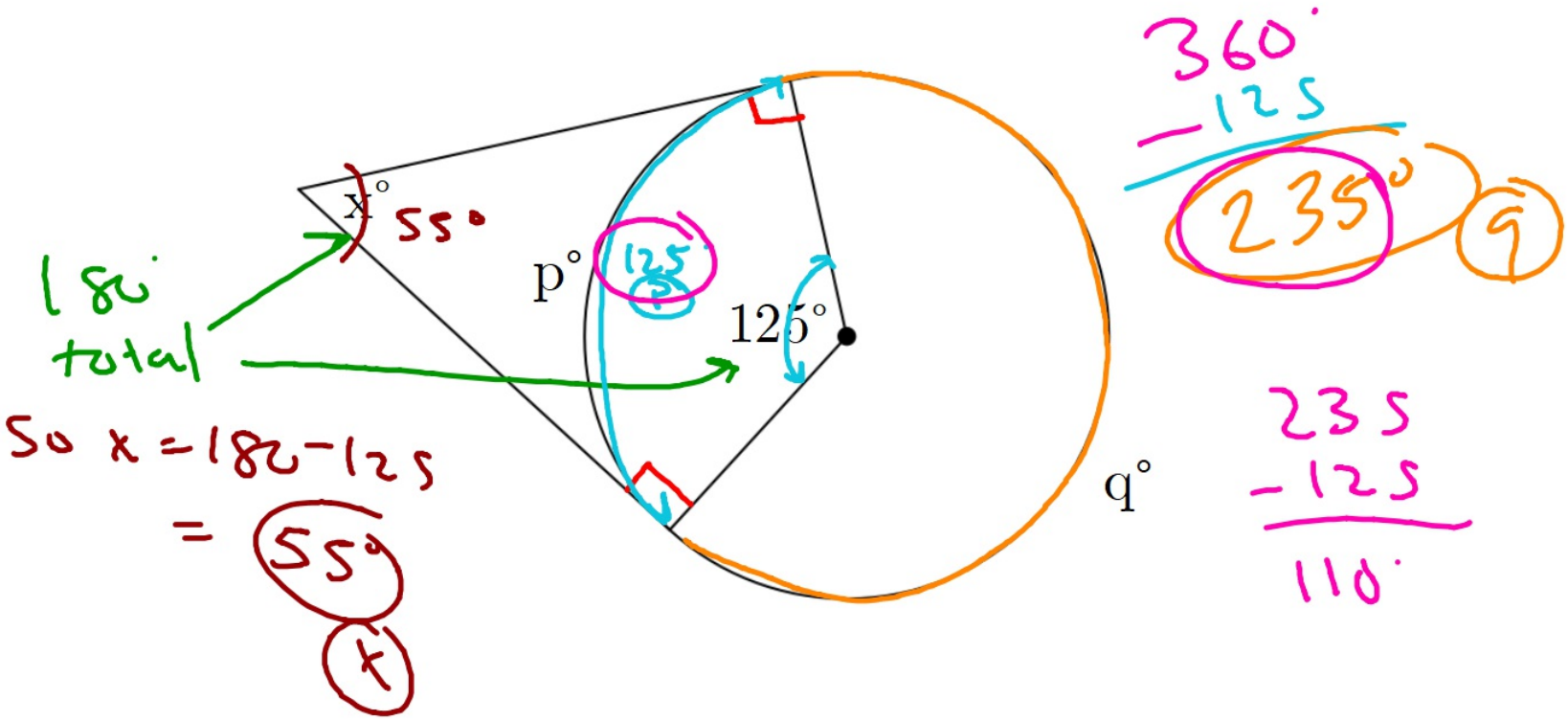
https://www.youtube.com/watch?v=_2sPYwds5dI

Implications of this

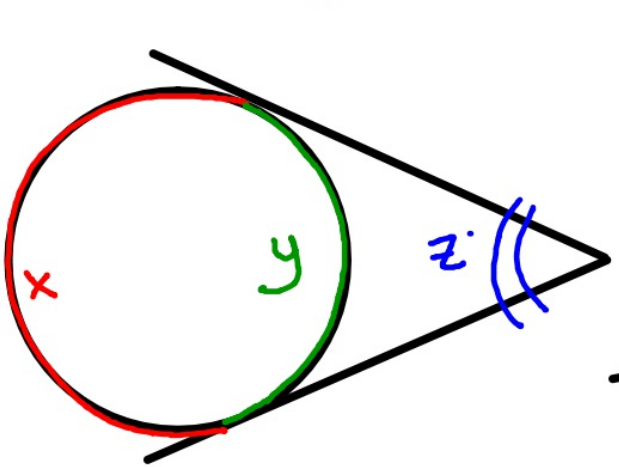
(notes)



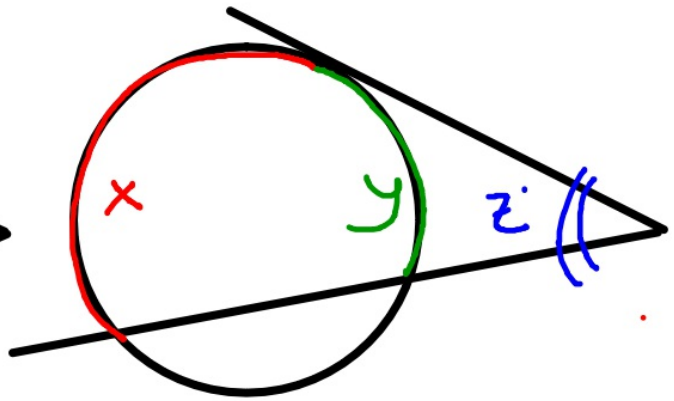
Find x, p and q



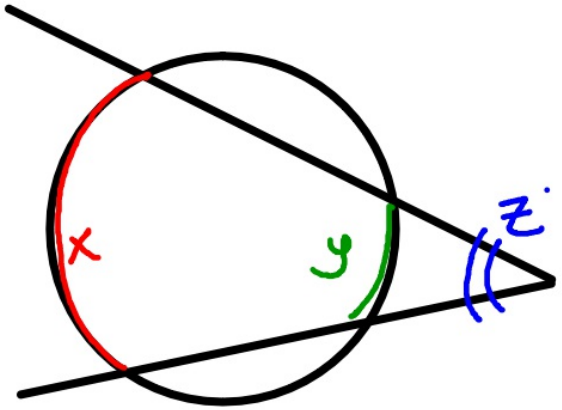
Generalizing:



tangent lines



tangent-secant



Secant-secant

$$z^\circ = \frac{x - y}{2}$$

Application: