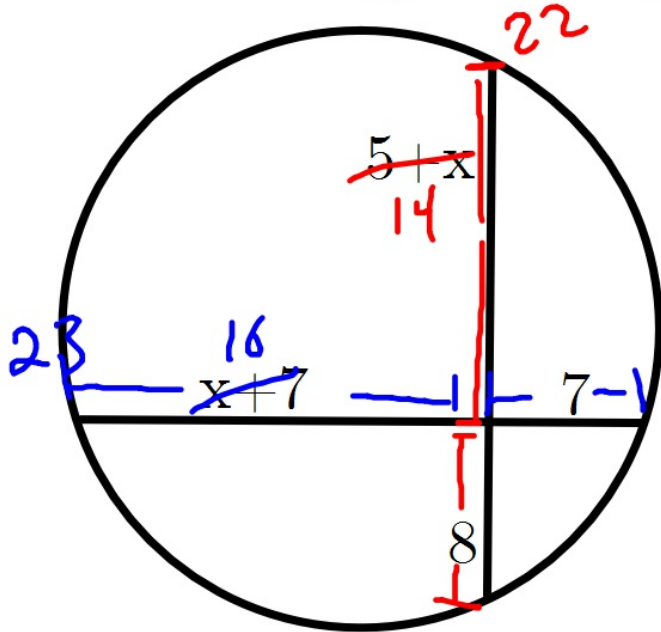


Good morning: warm up in notebooks



Determine if these chords are congruent.

$$8(5+x) = 7(x+7)$$

$$40 + 8x = 7x + 49$$

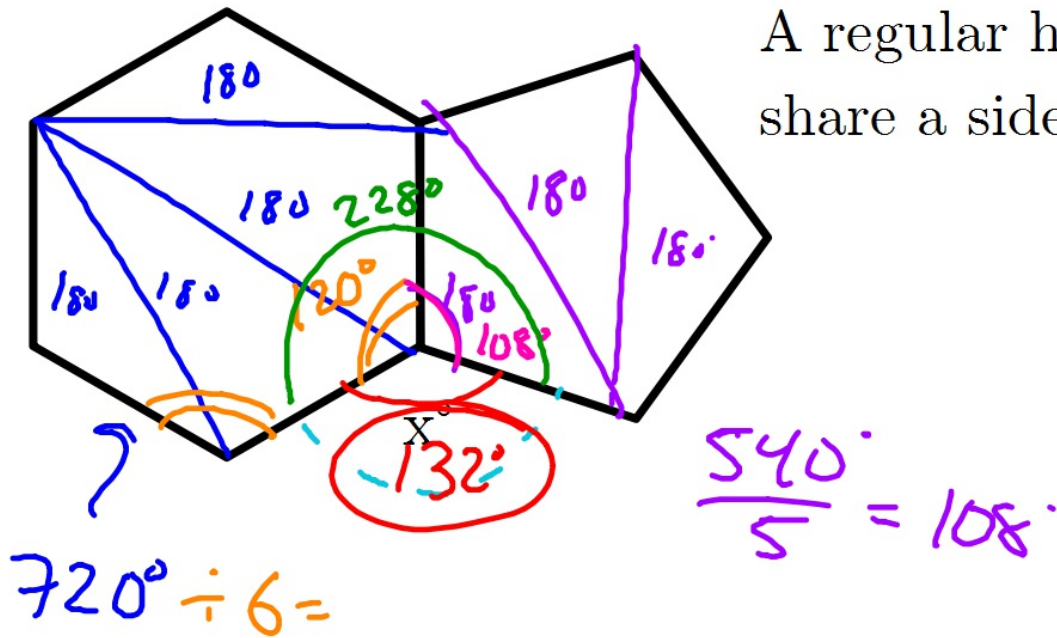
$$\underline{\underline{x = 9}}$$

reminders: tutoring tomorrow

assess Thursday

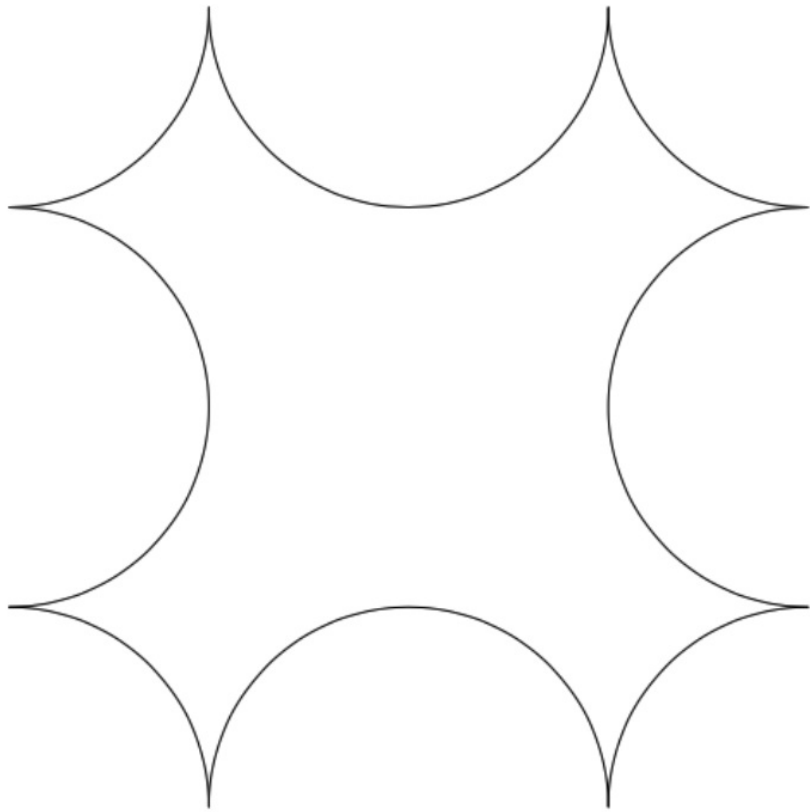
EOC: 4/27-28

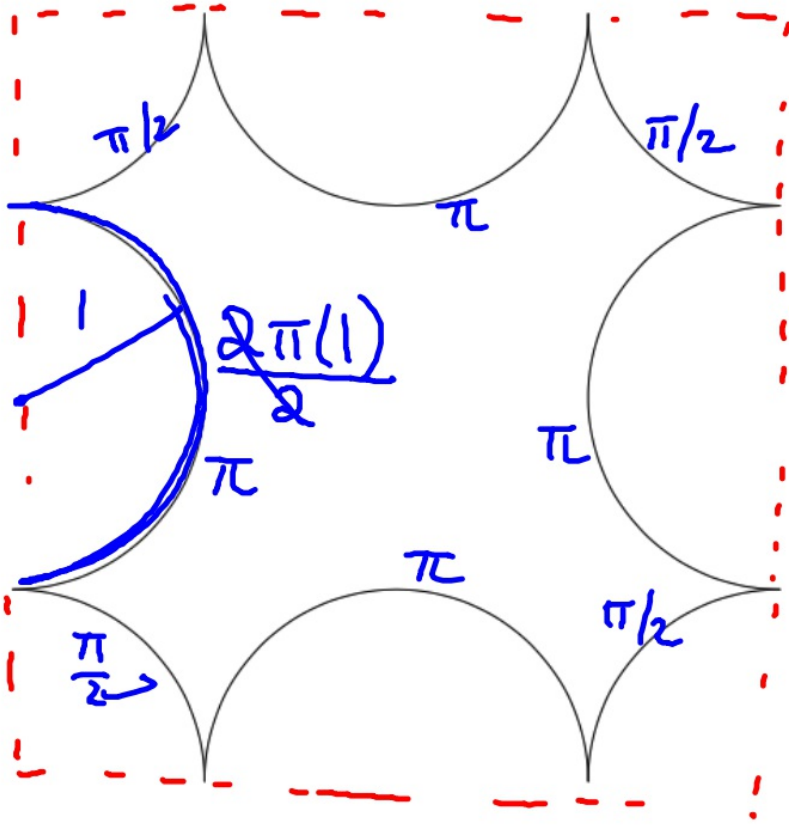
A regular hexagon and regular pentagon share a side. Find the indicated angle.



$$720^\circ \div 6 = 120^\circ$$

$$\frac{540^\circ}{5} = 108^\circ$$





The figure is formed with 4 semi-circles and 4 quarter circles each with radius 1.

Find the perimeter of the figure.


$$\underline{6\pi \text{ units}} \approx 18.85$$

$$\left(\frac{1}{2} \times 3 \right) \uparrow$$

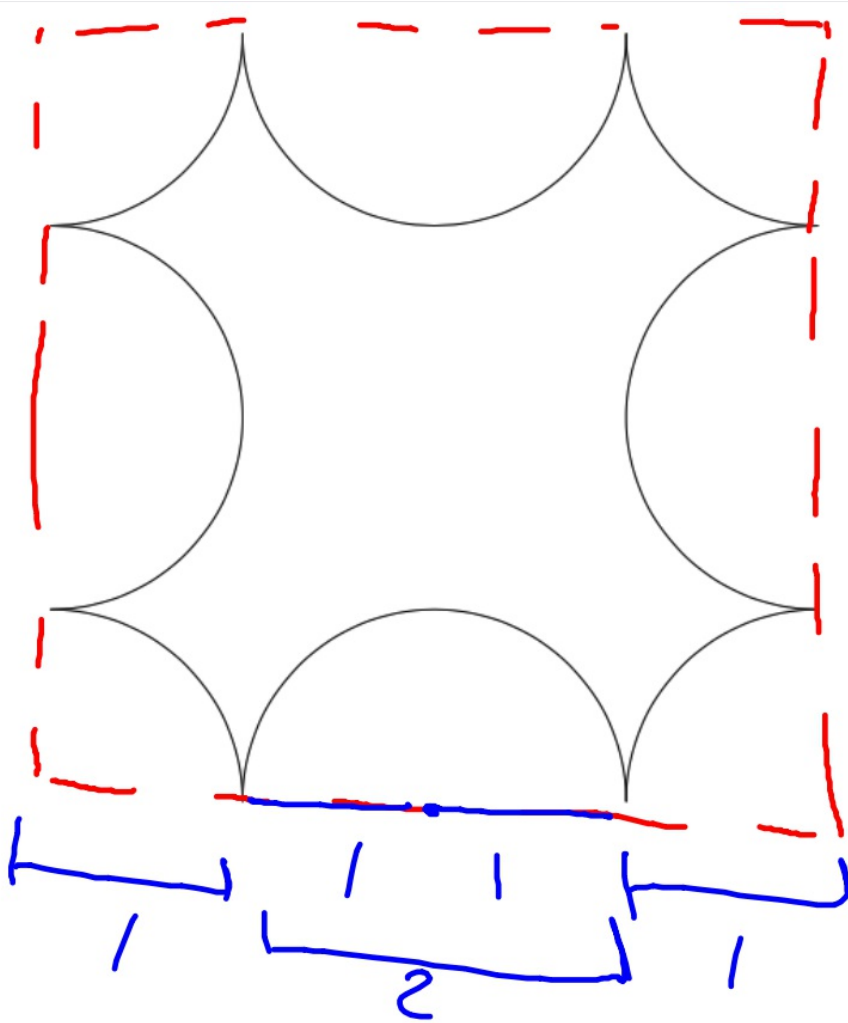
$$2\pi(1) \times 3$$

Find the area of the figure.

$$\square = 16$$

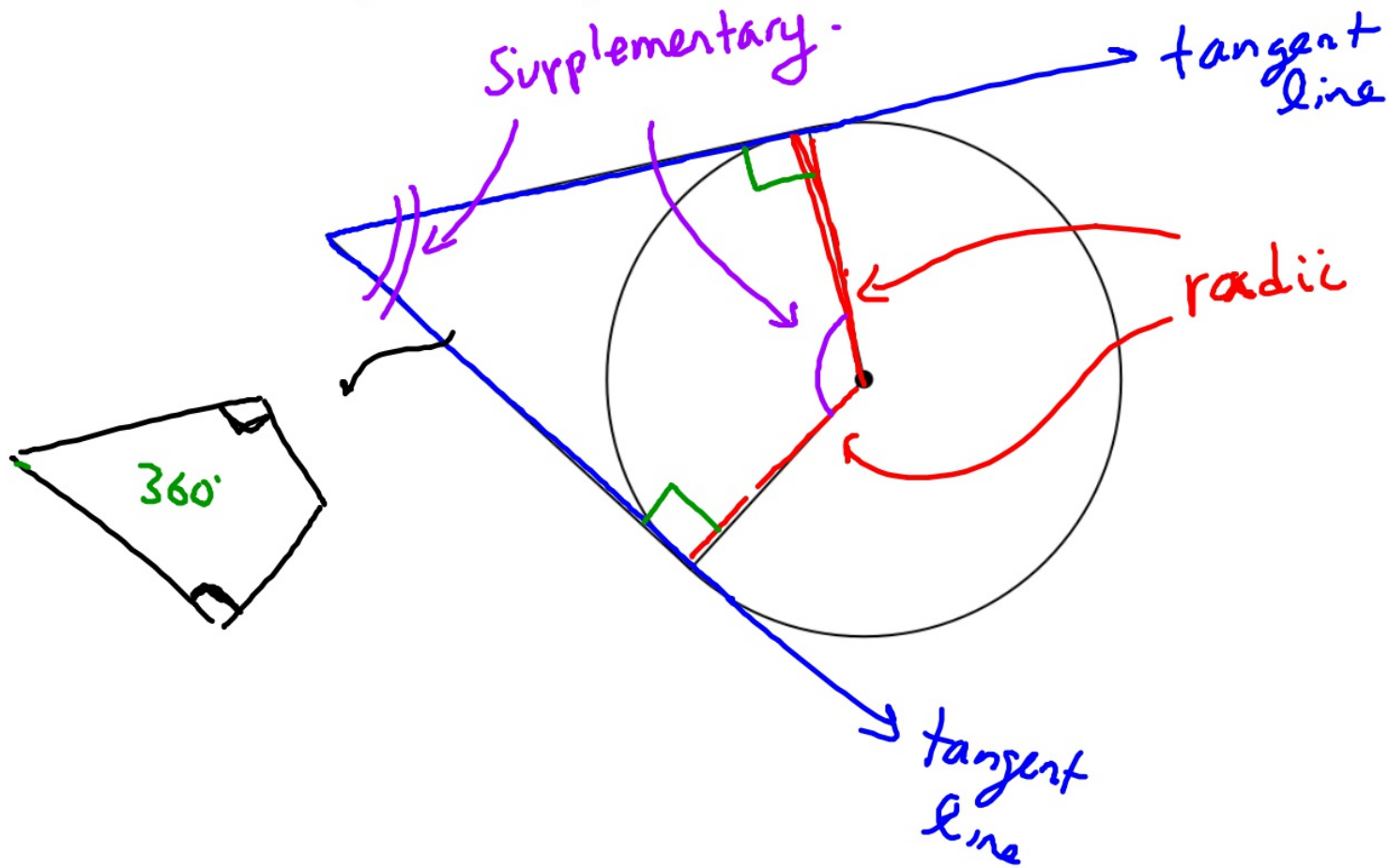

$$\pi(1)^2 = \pi$$
$$\frac{\times 3}{3\pi}$$

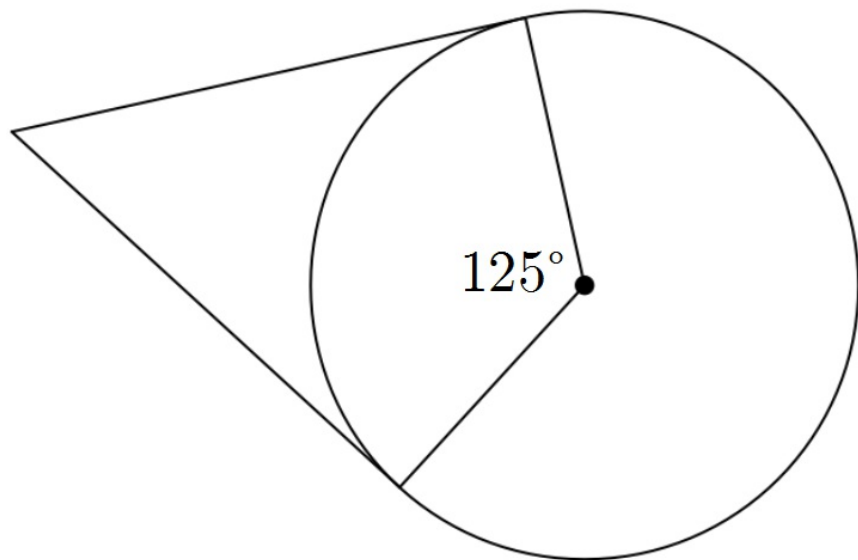
$$\boxed{16 - 3\pi}$$
$$\approx 6.58$$

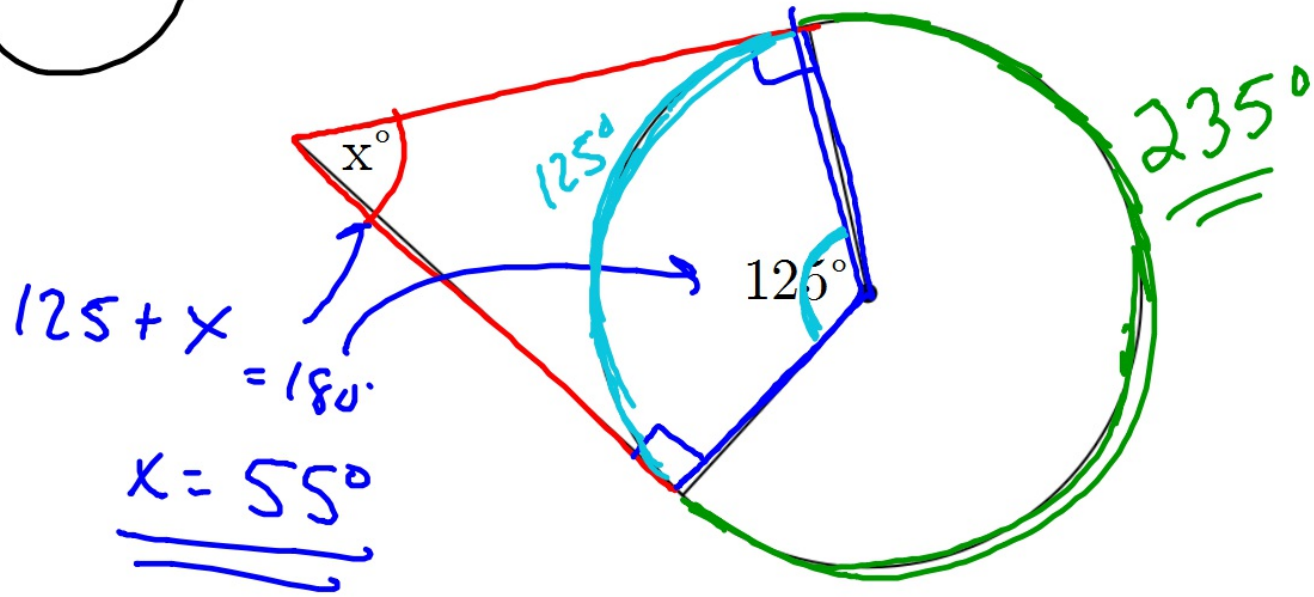
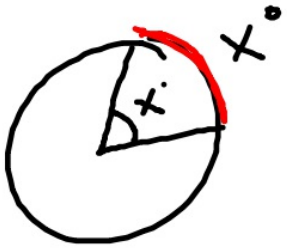


Secants and Tangents: Angles and Arcs

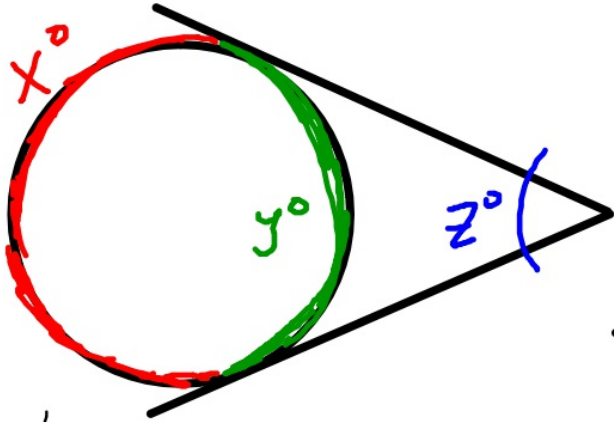
(notes)



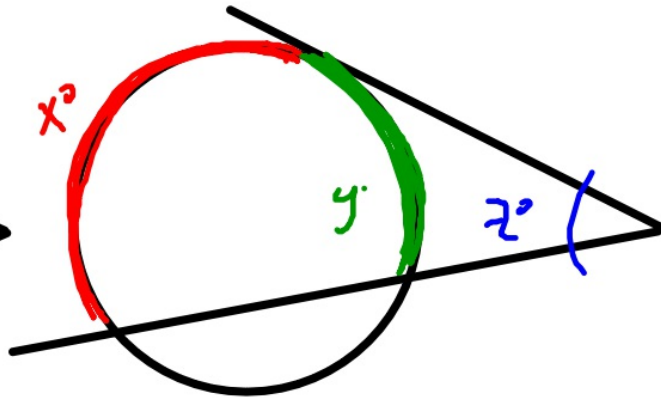




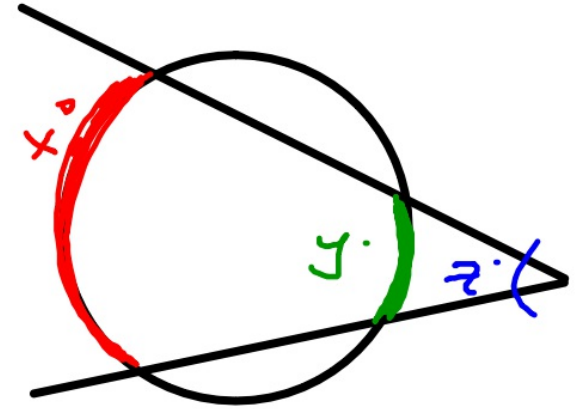
Generalizing:



tangent - tangent



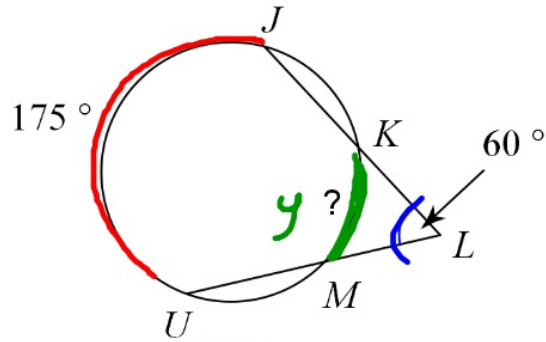
secant - tangent



secant - secant

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

Application:

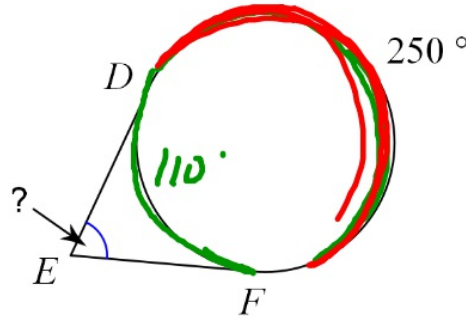


$$2(60 = \frac{175 - y}{2})$$

$$120 = 175 - y$$

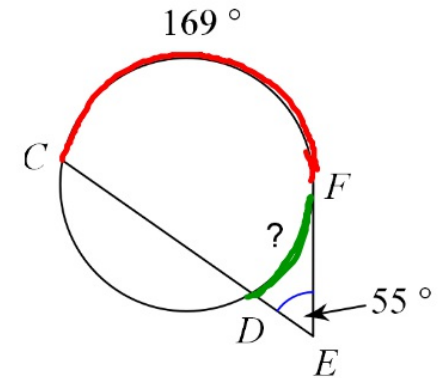
$$-55 = -y$$

$$\boxed{55 = y}$$



$$z^\circ = \frac{250 - 110}{2}$$

$$= 70^\circ$$



$$2(55 = \frac{169 - y}{2})$$

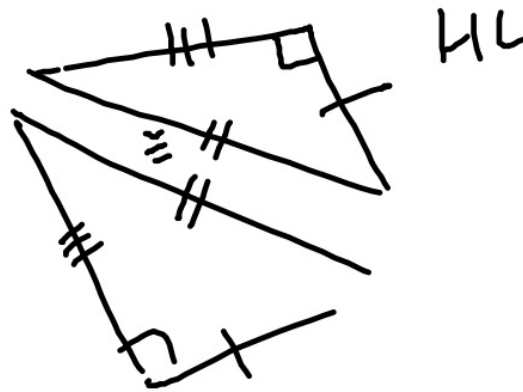
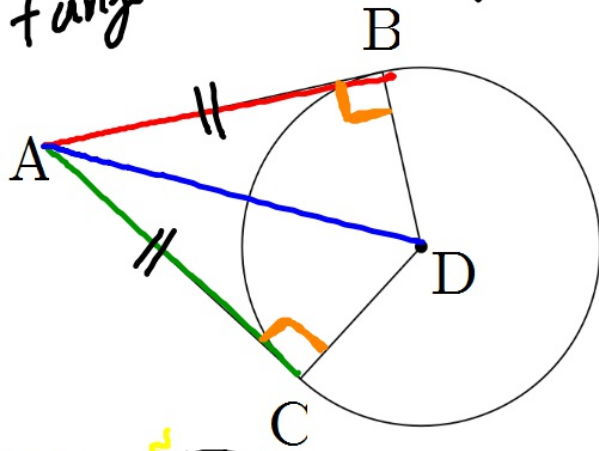
$$110 = 169 - y$$

$$-59 = -y$$

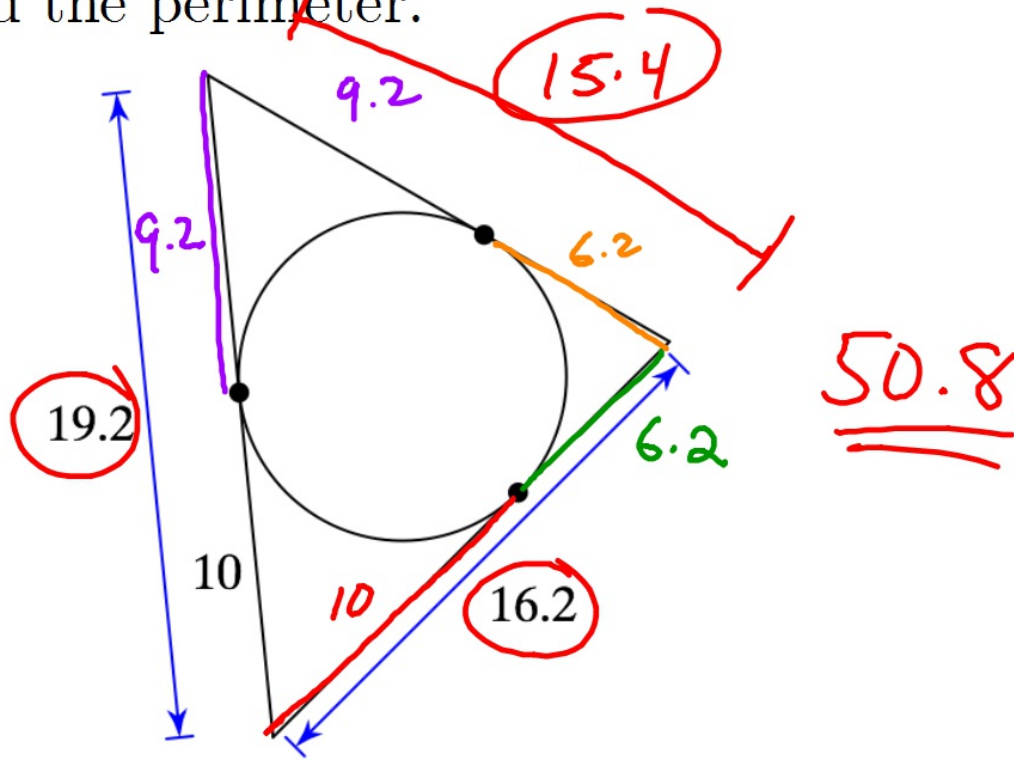
$$\boxed{59 = y}$$

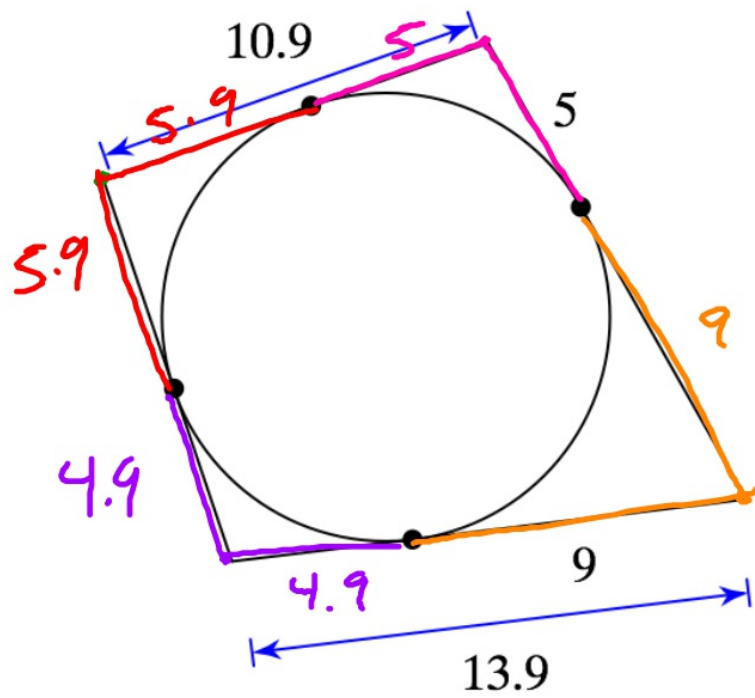
What else do you suspect is true about this figure?

tangents are congruent.



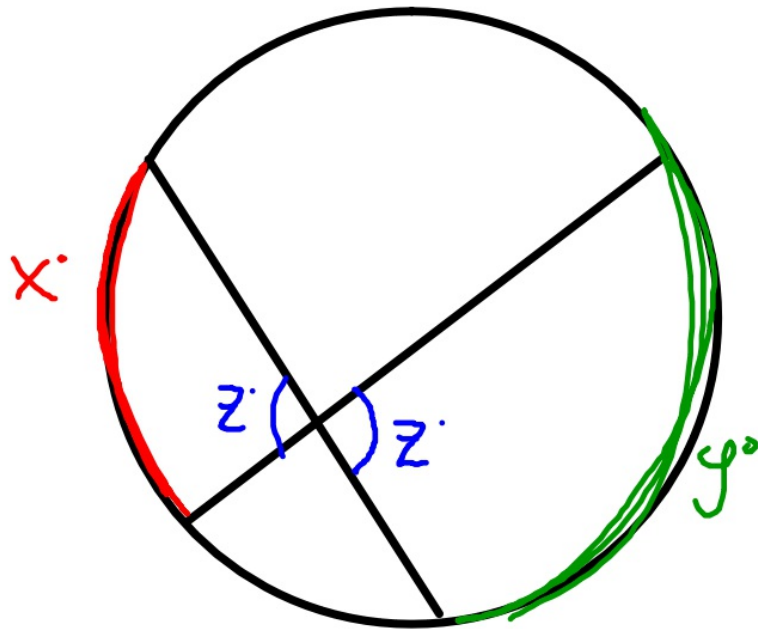
Find the perimeter.





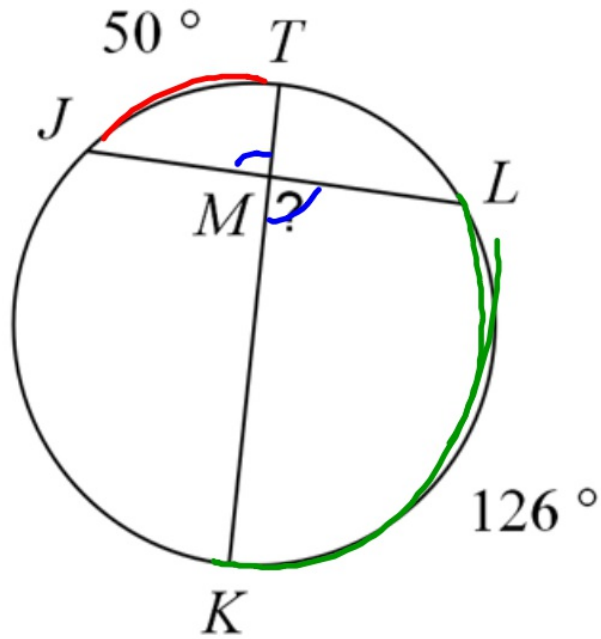
49.6

Arcs formed by Chords



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

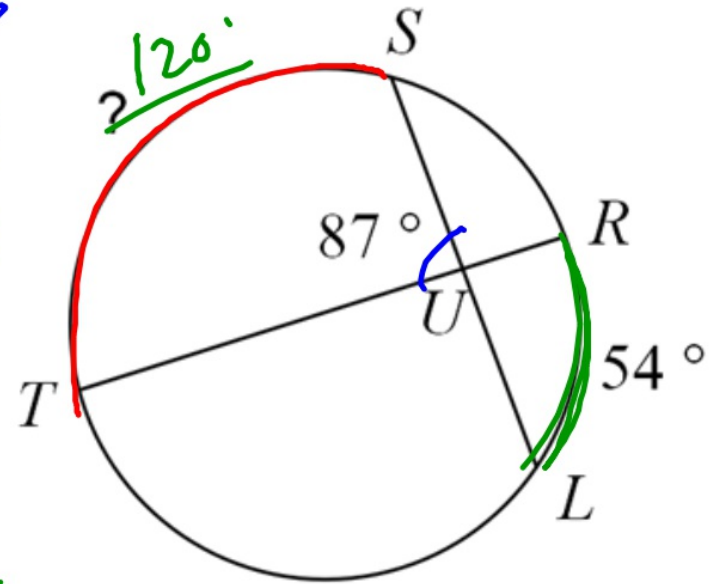
Examples:



$$\frac{50 + 126}{2} = z$$

$$\frac{176}{2} = z$$

$$\boxed{88 = z}$$



$$2 \left(87 = \frac{x + 54}{2} \right)$$

$$174 = x + 54$$

$$\begin{array}{r} 174 \\ - 54 \\ \hline \end{array}$$

$$\boxed{120 = x}$$

Theorems from today to know:

tangent lengths congruent

secant-tangent angle/arc pattern

chord-chord angle/arc pattern

~~cyclic quadrilaterals'~~ opposite angles supplementary

Homework:

complete the practice assessment AND check the solutions online

don't wait until Thursday to figure out how to do these!!!!!!!