

Good morning: assessments are being passed back overall, pretty good!

here are the hw answers, have questions ready

Answers to Sector Area, Tangent/Secants

1) $\frac{49\pi}{2} \text{ cm}^2$

2) $\frac{343\pi}{12} \text{ in}^2$

3) $48\pi \text{ ft}^2$

4) $\frac{225\pi}{8} \text{ m}^2$

5) 2.1

6) 14.6

7) 64°

8) 56°

Retakes available in DS: get a pass!
Next assessment: Thursday

visibly random grouping

• Arc Length, Degrees: $\frac{\theta}{360^\circ} = \frac{AL}{2\pi r}$

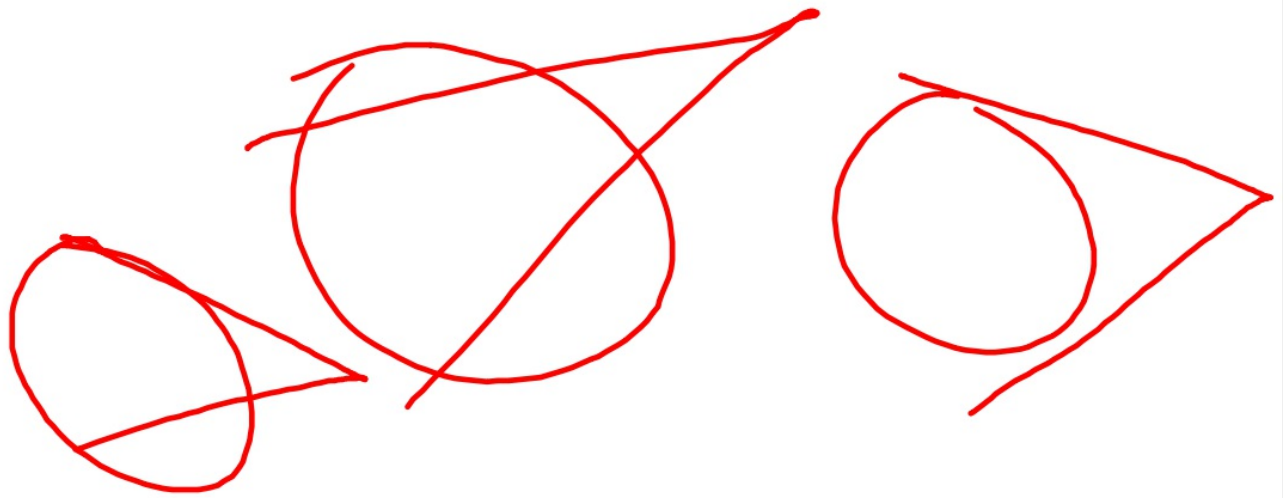
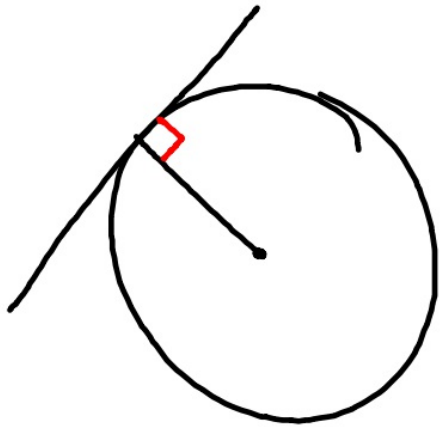
Arc Length, Radians: $r \cdot \theta$

• Sector Area, Degrees: $\frac{\theta}{360^\circ} = \frac{SA}{\pi r^2}$

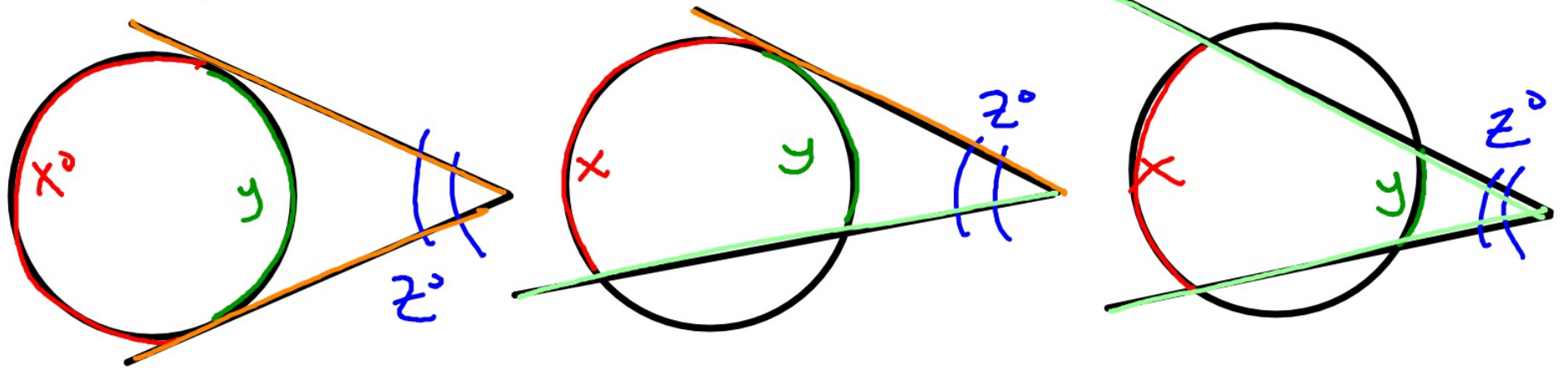
Sector Area, Radians: $\frac{1}{2} r^2 \cdot \theta$

Main concepts from Thursday

- sector area: degrees and radians
- radius and tangent line: perpendicular
- arcs/angles formed by tangents/secants

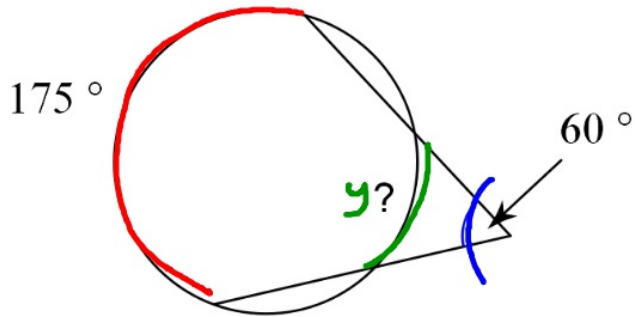


tangent lines secant line



$$z^0 = \frac{x - y}{2}$$

Application:

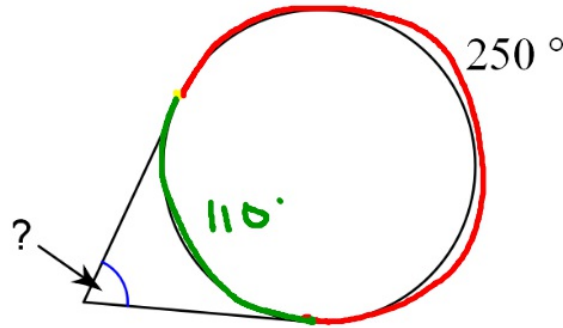


$$\frac{175 - y}{2} = 60$$

$$175 - y = 120$$

$$-y = -55$$

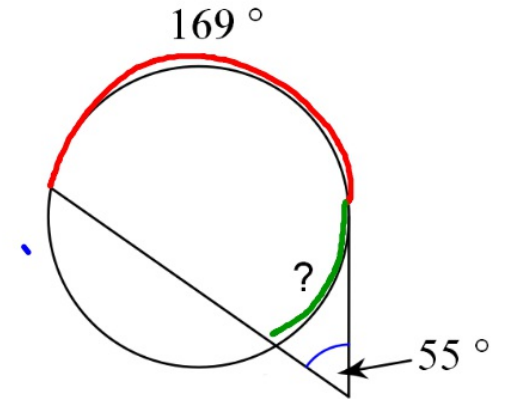
$$y = 55^\circ$$



$$\frac{250 - 110}{2}$$

$$\frac{140}{2}$$

$$70^\circ$$

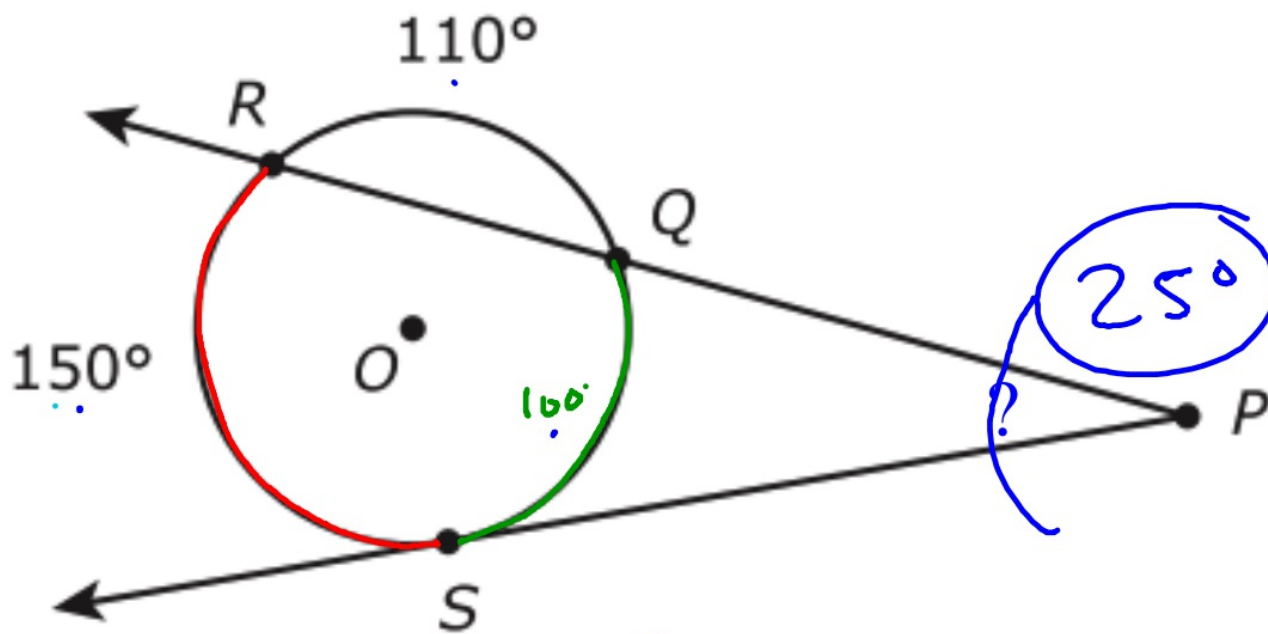


$$\frac{169 - y}{2} = 55$$

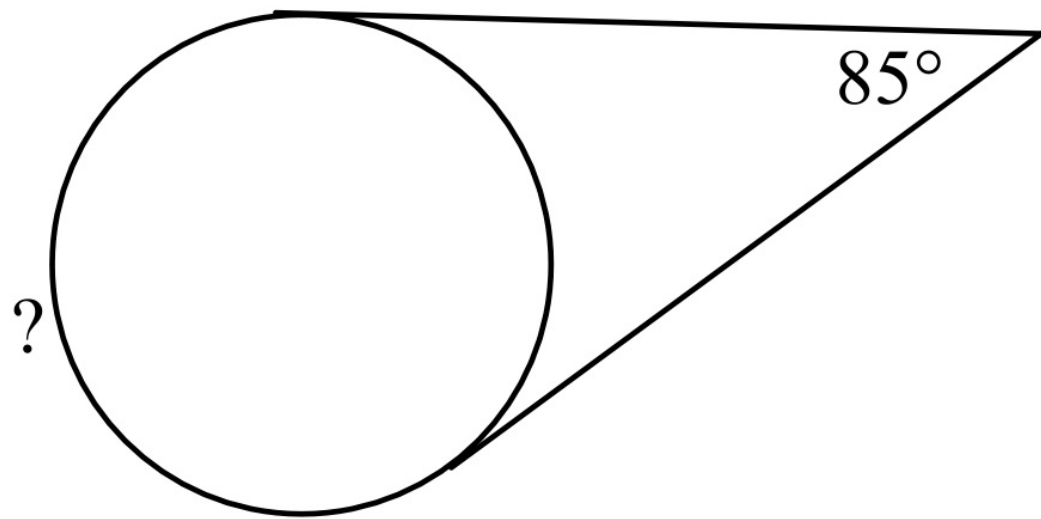
$$169 - y = 110$$

$$-y = -59$$

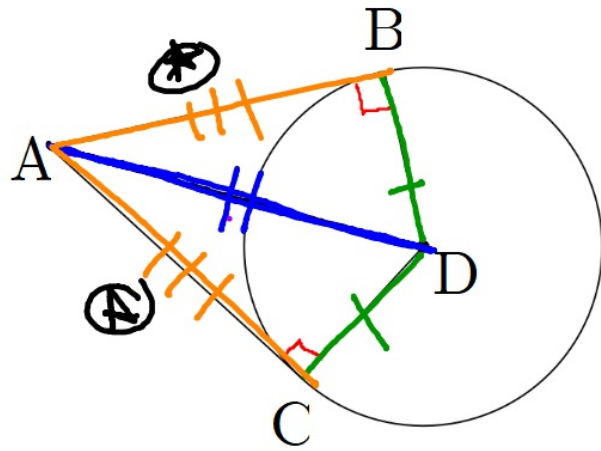
$$y = 59$$



"splitting the difference"



What else do you suspect is true about this figure?

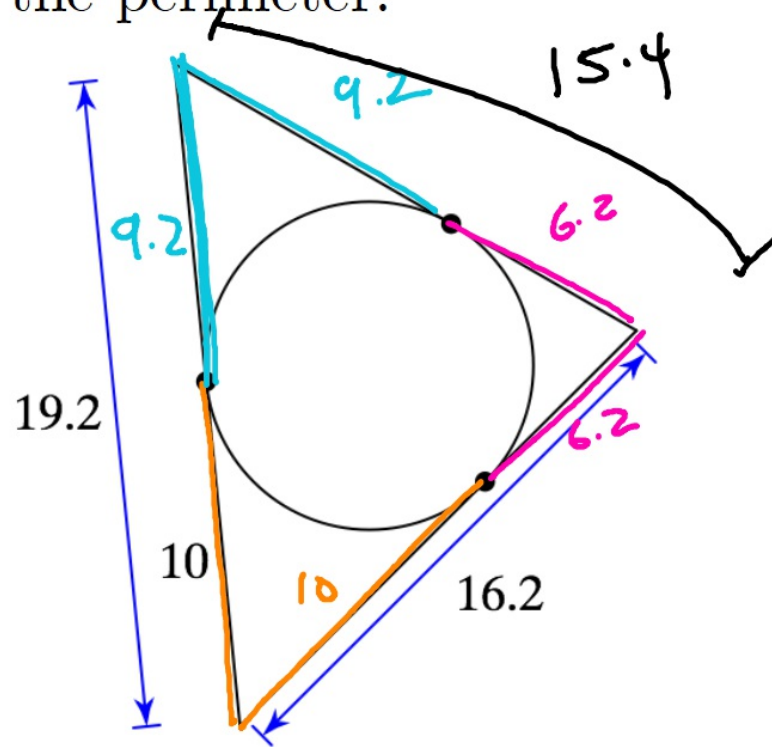


SSS
AAS
ASA
SAS
HL*

~~SSA~~
HL $\triangle \cong$

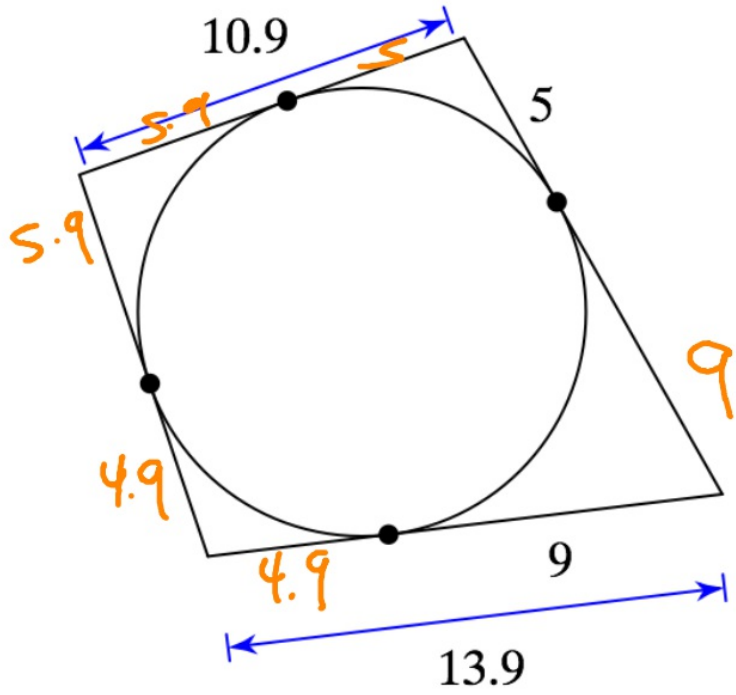
CPCTC

Find the perimeter.



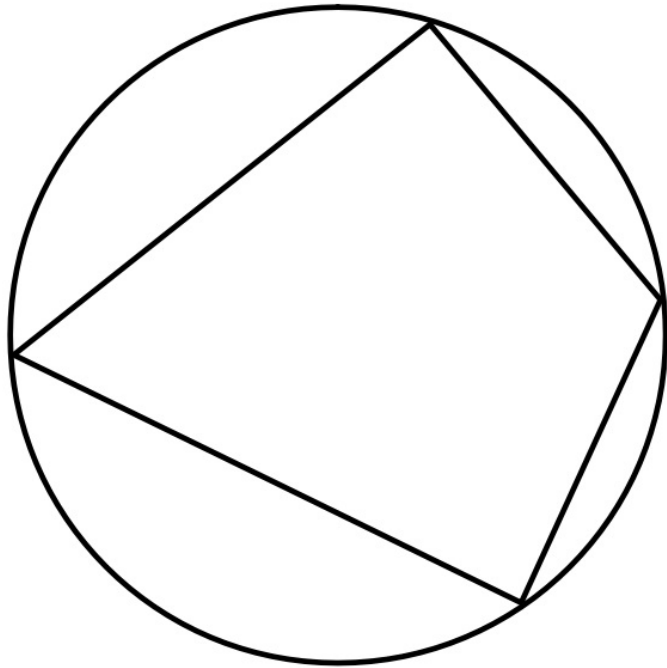
50.8



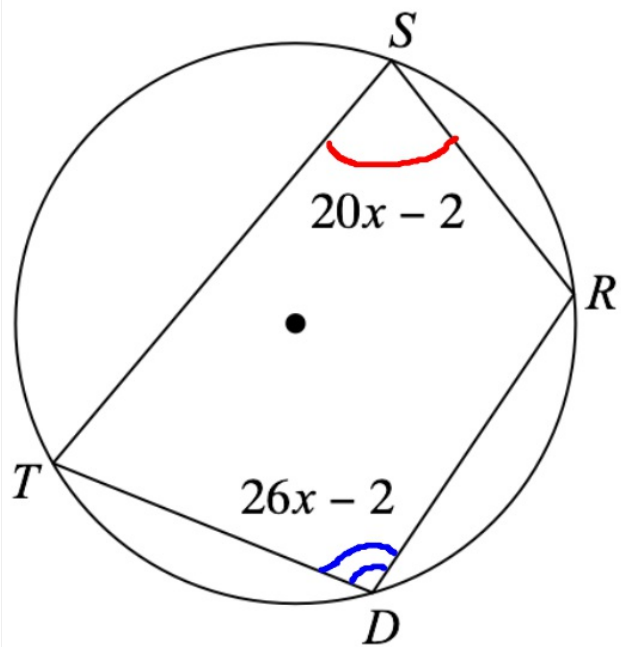


49.6

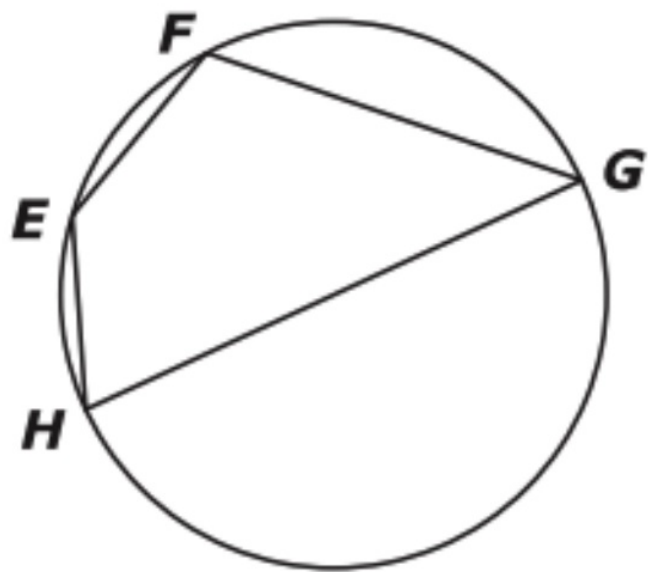
Cyclic Quadrilaterals



Find $m\angle TDR$



Quadrilateral $EFGH$ is inscribed in a circle as shown.



$m\angle F = (4x + 10)^\circ$, $m\angle G = (2x - 5)^\circ$, and $m\angle H = (3x - 5)^\circ$. What is the value of x ?

Homework

#1-10 on tonight's handout

posted to Google Classroom (do it on your own paper :))

Test Thursday

	8	9	10	11 1A2A test, rev	12 3B4B test, rev
	15 review	16 no 1A 2A review	17 3B 4B review	18 no 2A EOC p1 1A review	19 3B 4B review
	22 3B 4B review	23 1A 2A review	24 no 3B 4B rev	25 1A 2A review	26 EOC!!
	29	30			