



$$(x+a)^2 \neq x^2+a^2$$



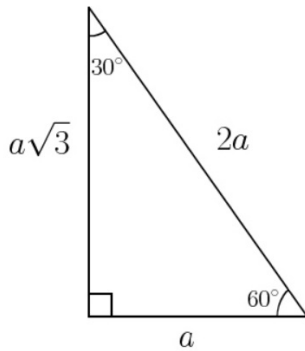
Hands in your laps. No writing. Use your brain.  
Expand mentally:

$$(x+9)^2$$

$$(x+a)^2 = x^2 + 2ax + a^2$$

Warm up being handed out  
The circle has an area of  $36\pi$  cm<sup>2</sup>.

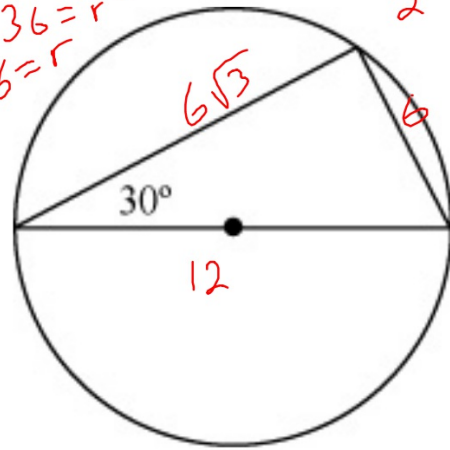
Find the exact area of the triangle.  
No rounded decimals!!!!\*



$$36\pi = \pi r^2$$
$$36 = r^2$$
$$6 = r$$

Reminders:

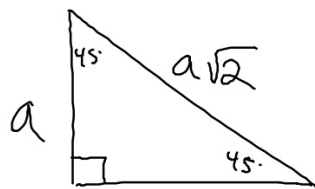
- EOC part 2: May 5th



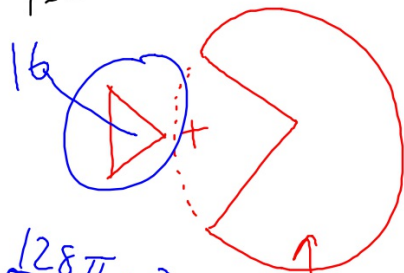
$$\frac{1}{2} \cdot 6 \cdot 6\sqrt{3}$$
$$18\sqrt{3}$$

Find the area of the shape.

316.86

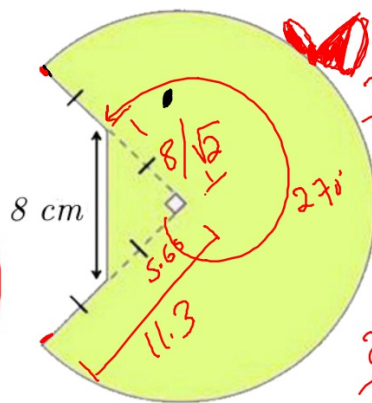


$$\frac{8}{\sqrt{2}} \rightarrow \frac{a}{\left(\frac{16}{\sqrt{2}}\right)^2} \pi$$



$$\frac{128\pi \cdot \frac{3}{4}}{270} = 96\pi$$

300.86

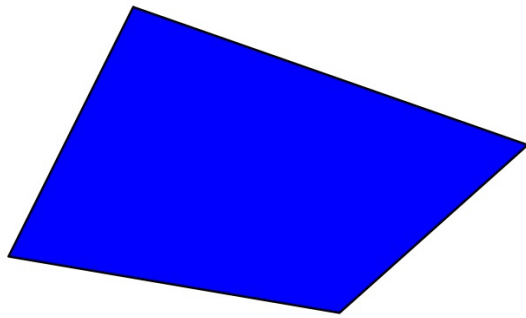
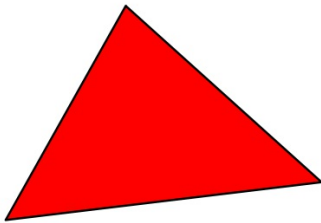


$$\frac{3}{4} [\pi (11.3)^2] = 300.86$$

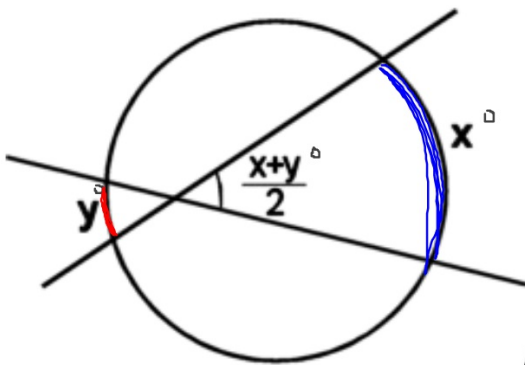
$$\frac{270}{360}$$

## Quick Review

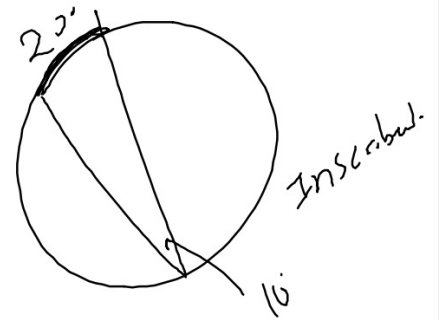
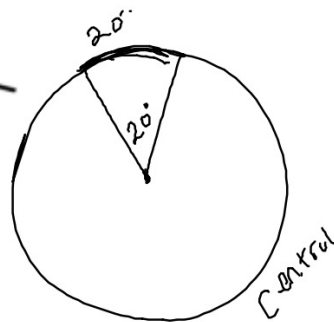
How many degrees live inside these figures? Tell your neighbors.

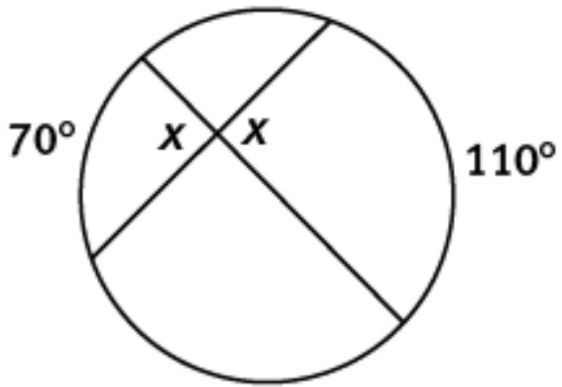


Last night's HW video:



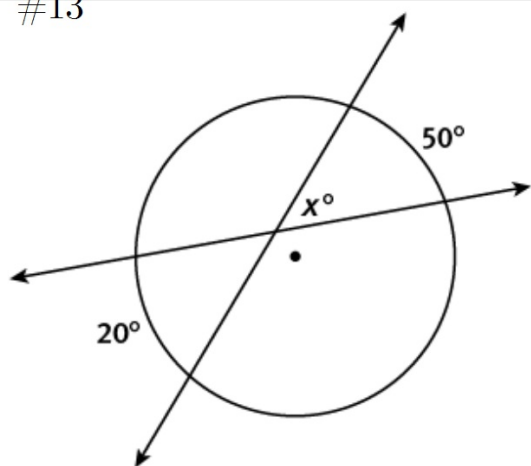
The angle formed by two chords is equal to the average of the arcs they each "capture"





$$\frac{110 + 70}{2} = \frac{180}{2} = 90^\circ$$

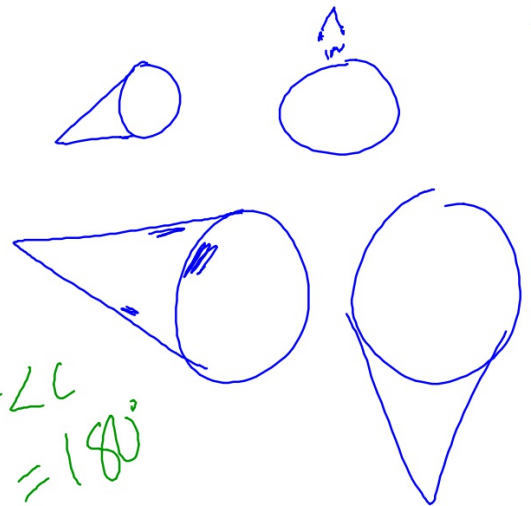
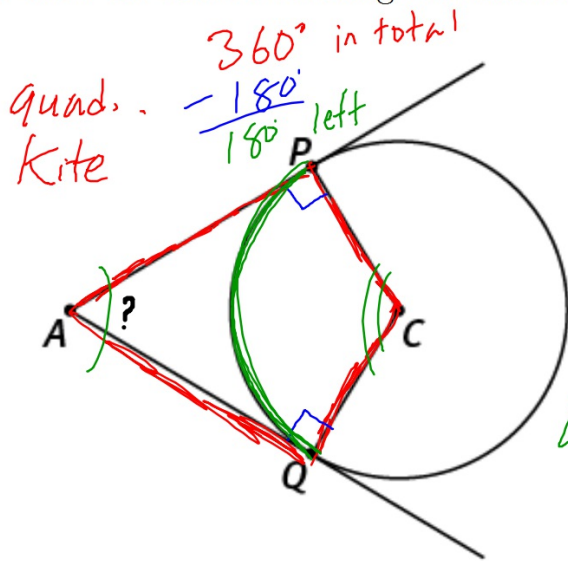
#13



$35^\circ$



Recall: How do radii and tangents intersect?



$$\angle A + \angle C = 180^\circ$$

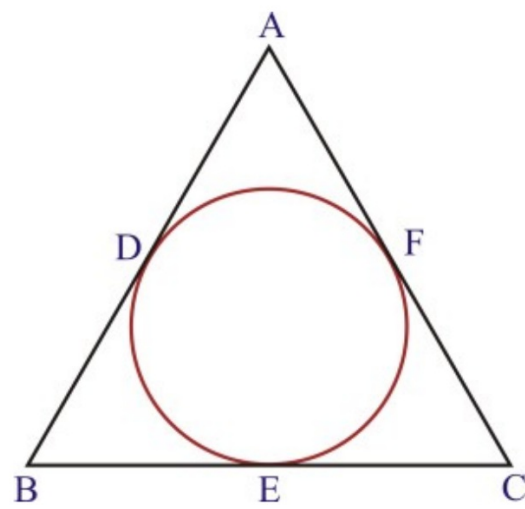
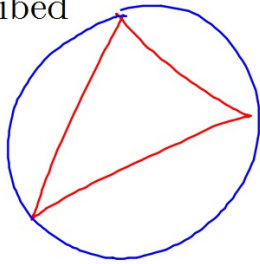
Inscribed: Drawn within

Circumscribed: Drawn around

around

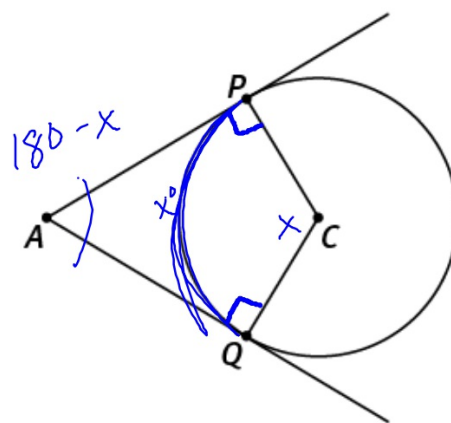
triangle

circumscribed

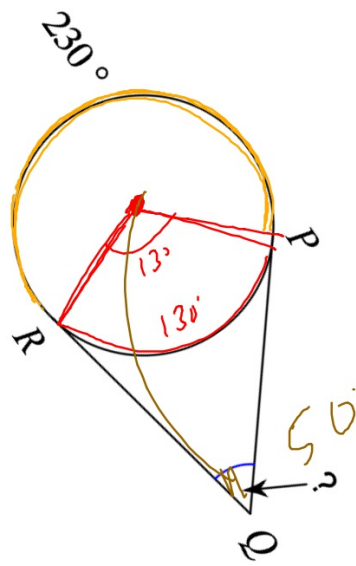


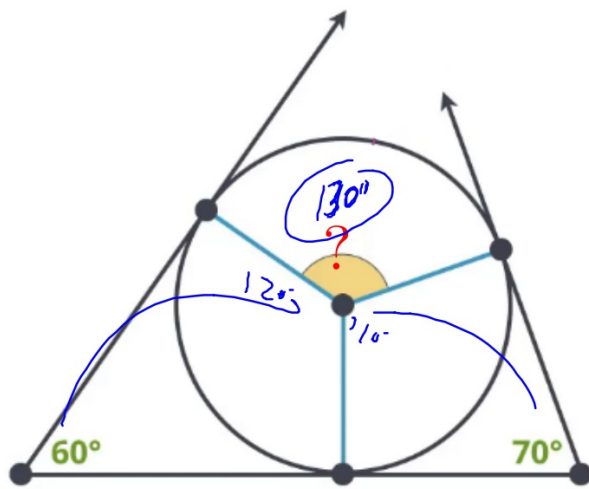
Angle A circumscribes the circle

A circumscribed angle is supplementary to the arc it captures



# Ice Cream Cone Problem





## Play and Discover

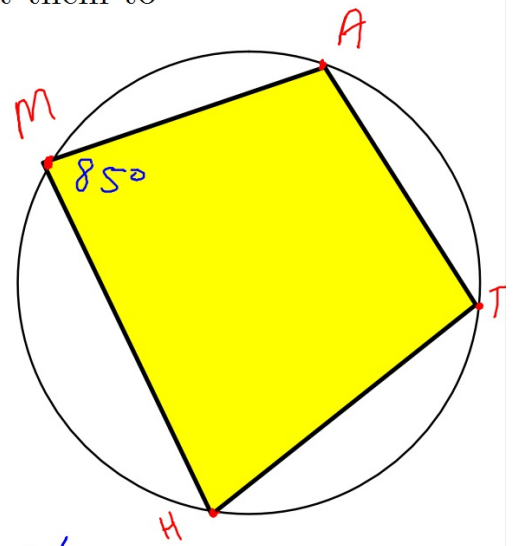
Create 4 points at random on the circle and connect them to make a convex quadrilateral.

Carefully measure each angle using a protractor. Record your angle measures.

What do you notice?

Check with your neighbor to see what they found.

*Cyclic Quadrilateral.  
Opposite angles  
are supplementary.*



Homework:

p. 361 #10abc

p. 370 #10 and 11\*

TYPO on 11

$$\ast \cancel{m \widehat{NQM} = 200^\circ}$$

$$\underline{m \widehat{MNQ} = 200^\circ}$$
