

SLO: I can use definitions & theorems about points, lines and planes to determine relationships between them. Problems worthy of attack prove their worth by fighting back. —Piet Hein THE ROAD TO WISDOM? Well, it's plain and simple to express. Err and err and err again, but less and less and less. —Piet Hein.

VOCABULARY (have your vocabulary sheet out EVERY day)

(1) TO DO: Use the links on my website (words with a *) to define and illustrate the following terms on the vocabulary sheet. If you do not have access to the website, use a geometry textbook (glossary and index) to define and illustrate them.

Circle *	Center *	Radius *	Diameter *	Central Angle *
Arc *	Major Arc *	Minor Arc *	Inscribed Angle *	Intercepted Arc *

(2) TO READ & PLAY: Obtain a set of circle vocabulary cards. Shuffle the cards and place them face down on the desks in your group. Each student in the group will take a turn in order from the student with the longest hair to the student with the shortest hair. A turn: Flip 2 cards over. If they are a match, take them and keep them together as a pair and take another turn. If they are not a match, then the next person takes a turn. Play until all matches are made. Record the number of pairs you made. Shuffle the cards and play again. Play as many games as you can in **12 minutes** then stop and move on to the next task.

Game 1 # of pairs: _____ Game 2 # of pairs _____ Game 3 # of pairs _____ Total # of pairs _____

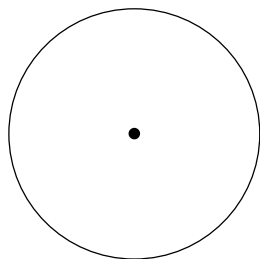
Name of student with the most pairs overall for your group: _____

(Teacher Note -- File: Circle Vocabulary Cards)

(3) TO READ AND DO: Use the website link for Task 1 #3 (be sure to click the "show central angle box) or your textbook to investigate the relationship. Complete a sketch for each example. Be sure to label the arc measure and the central angle measure.

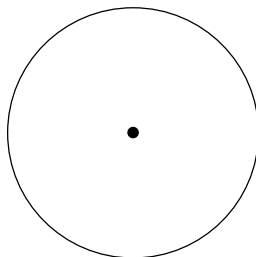
a) A central angle measures 80° .

Therefore, the intercepted arc measures _____



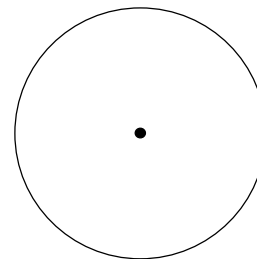
b) A central angle measures 222° .

Therefore, the intercepted arc measures _____



c) An arc measures 68° .

Therefore, the subtended central angle measures _____



Write a sentence that summarizes the relationship between the measure of a **central angle** and the measure of the **arc it intercepts**. _____

BEFORE YOU GO ON:

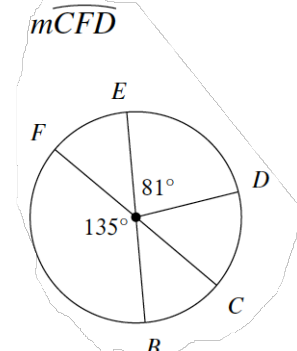
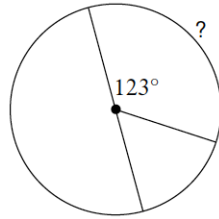
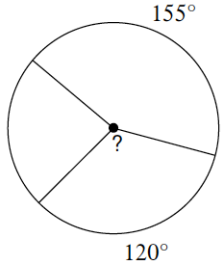
The sum of all non-overlapping central angles in a circle is _____ so the measure of the sum all non-overlapping arcs is _____.

Vertical angles are _____. And finally, angles or arcs with the same marks are _____.

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(4) Apply vocabulary and the relationship you found in part 3 of this task. Finish for Homework & check.

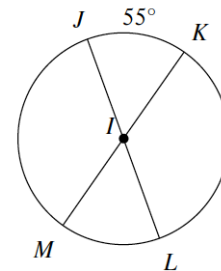
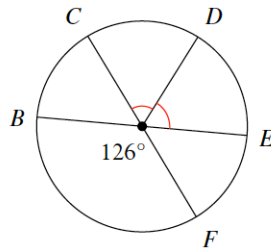
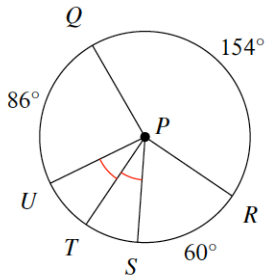
Find the measure of the arc or central angle indicated. Assume that lines which appear to be diameters are actual diameters.



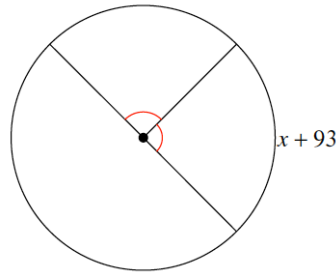
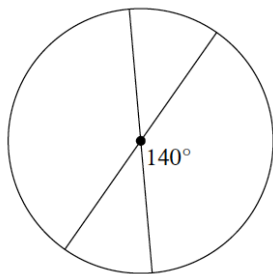
$m\angle SPQ$

$m\widehat{EFC}$

$m\angle MIJ$



Solve for x. Assume that lines which appear to be diameters are actual diameters.



Find the measure of the arc or central angle indicated. Assume that lines which appear to be diameters are actual diameters.

$m\widehat{WV}$

$m\angle VST$

