

Name \_\_\_\_\_ Per \_\_\_\_\_

LO: I can identify relationships with arc measures and chords and use them to solve problems..

 DO NOW On the back of this packet (1) Circles and arc measure**Congruent Chords**(a)  On page 1 of your circle notes, match the term and description with the diagram. Cut and tape each term next to its diagram.(b)  Chords AB and DC are congruent. Show this in the diagram.(c)  What does it look like is true about arcs AB and DC?

\_\_\_\_\_

(d)  Prove that your observation is true. (Label the center O)

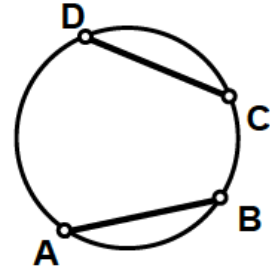
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**Parallel chords (use the link to help you)** <https://schoolyourself.org/learn/geometry/parallel-chords>(d)  Chords AB and DC are parallel. Show this in the diagram.(e)  What does it look like is true about arcs AC and BD?

\_\_\_\_\_

(g)  Prove that your observation is true.

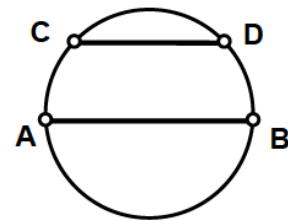
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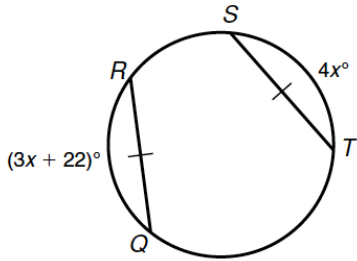


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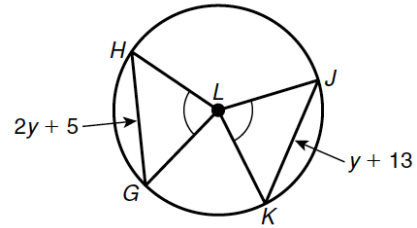


□ (2) Use what you know about **congruent chords** and **parallel chords** to find the indicated measures.

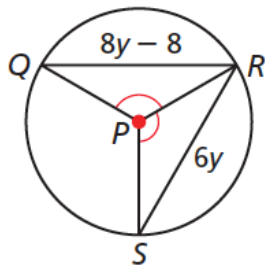
(a)  $\overline{QR} \cong \overline{ST}$ . Find  $m\widehat{QR}$ .



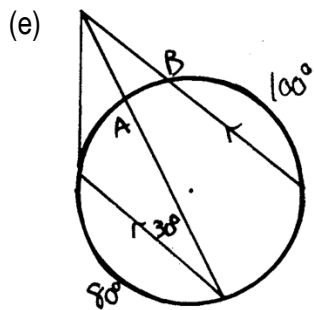
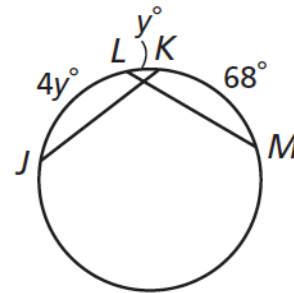
(b)  $\angle HLG \cong \angle KLJ$ . Find  $\widehat{GH}$ .



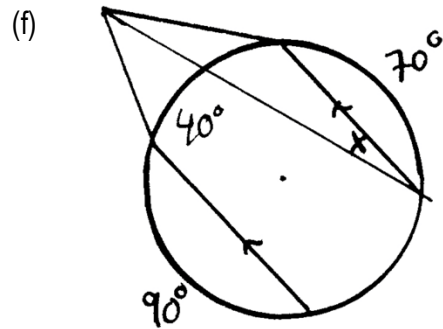
(c)  $\angle QPR \cong \angle RPS$ . Find  $\widehat{QR}$ .



(d)  $\overline{JK} \cong \overline{LM}$ . Find  $m\widehat{JK}$ .



$m\widehat{AB} = \underline{\hspace{2cm}}$



Find  $x$ .

(6) Exit Ticket

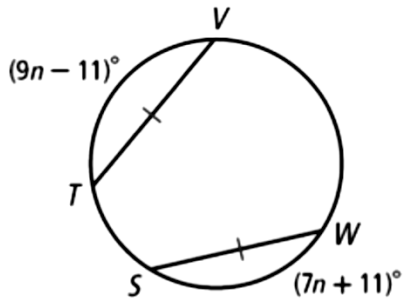
calculator

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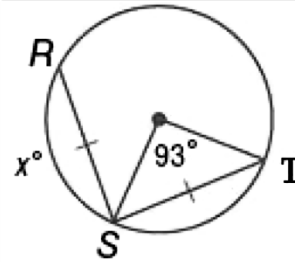
(7) Homework

calculator

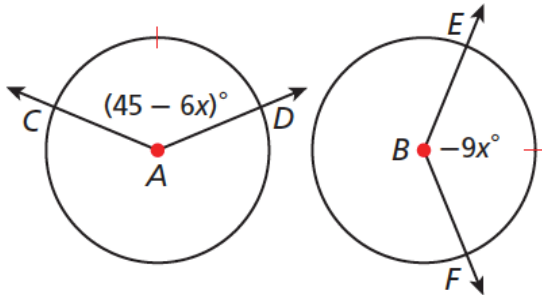
(1) Find  $n$



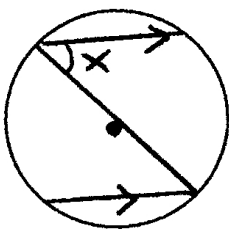
(2) Find  $x$



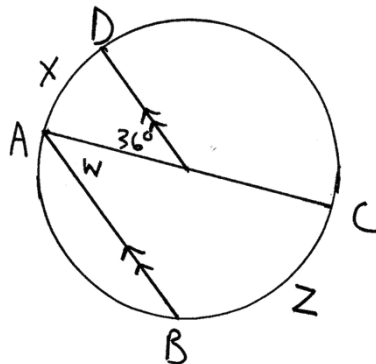
(3)  $\odot A \cong \odot B$ , and  $\widehat{CD} \cong \widehat{EF}$ . Find  $m\angle EBF$ .



4. 70



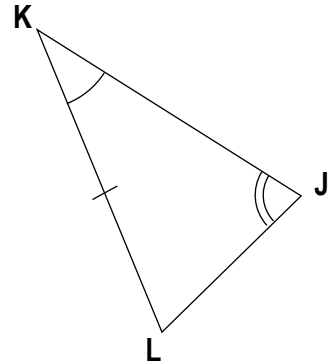
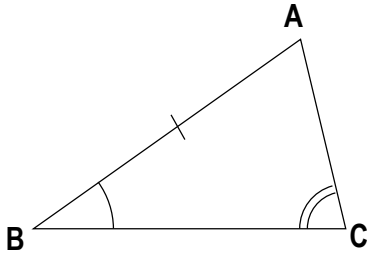
④ Find  $x$ ,  $w$ , and  $z$ .  
Also find Arc  $AB$



(7)  
calculator

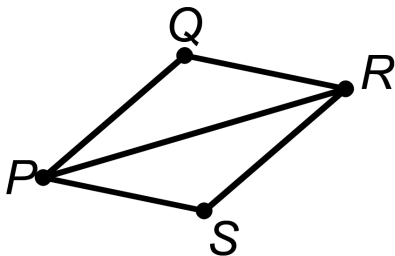
### Homework

(5) Review: Describe a sequence of transformations that will map one triangle onto the other. Sketch after each transformation



(6) Given:  $\angle QPR \cong \angle SRP$  and  
 $\angle QRP \cong \angle SPR$

Prove: Two triangles are congruent

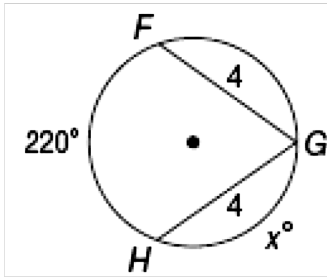


Exit Ticket Name \_\_\_\_\_ Date \_\_\_\_\_ Per \_\_\_\_\_ 10.3R

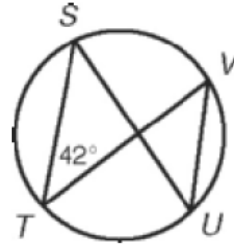
The LO (Learning Outcomes) are written below your name on the front of this packet. Demonstrate your achievement of these outcomes by doing the following:

(1) Find the indicated measure for each diagram.

(a)  $x =$  \_\_\_\_\_



(b) Segment ST is parallel to segment VU. Arc SV =  $84^\circ$   
Find the measure of arc UT



**DO NOW** Name \_\_\_\_\_ Date \_\_\_\_\_ Per \_\_\_\_\_

10.3R

(1) In the space below, sketch:

(a) a circle with a  $70^\circ$  central angle and label the intercepted arc with its measure

(b) a circle with a  $70^\circ$  inscribed angle and label the intercepted arc with its measure

(2) Review: Describe the composition of transformations:  $D_{P,2} \left( r_m \left( T_{XY} (ABCD) \right) \right)$