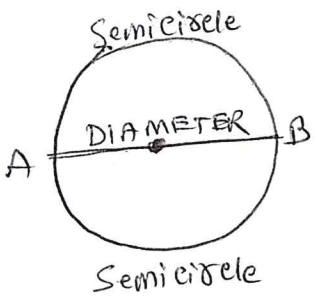
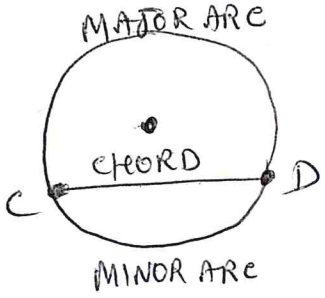
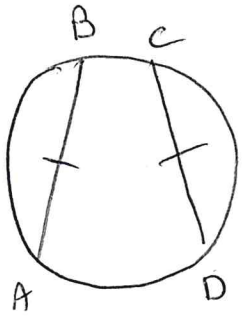
Mr.Reddy's Notes 10.3 Properties of Chords JMA Geometry

(1)





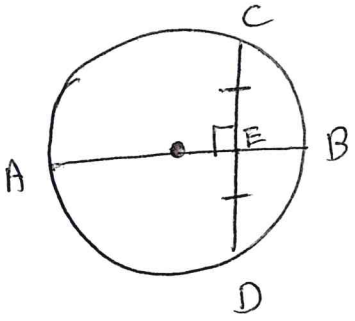
(2)



$\overset{\frown}{AB} = \overset{\frown}{CD}$ if and only if $\overline{AB} = \overline{CD}$

[$\overline{AB}$, $\overline{CD}$ CHORDS]

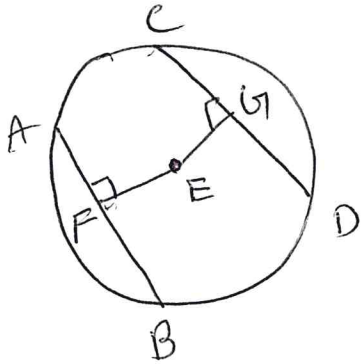
(3)



IF $\overline{AB} \perp \overline{CD}$;
THEN $\overline{CE} = \overline{ED}$

[$\overline{AB}$ = DIAMETER
$\overline{CD}$ = CHORD]

(4) Same circle or IN CONGRUENT CIRCLES, TWO CHORDS ARE CONGRUENT IF AND ONLY IF THEY ARE EQUIDISTANT FROM THE CENTER.



$\overline{AB} = \overline{CD}$ if and only IF $\overline{EF} = \overline{EG}$

Name _____ Date _____

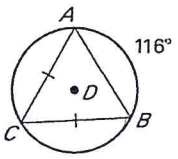
LESSON 10.3

Practice

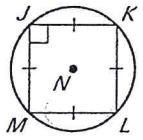
For use with pages 664–670

Find the measure of the given arc or chord.

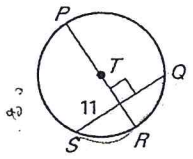
1. $m\overset{\frown}{BC}$



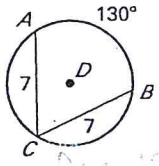
2. $m\overset{\frown}{LM}$



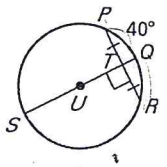
3. $\overline{QS}$



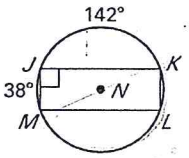
4. $m\overset{\frown}{AC}$



5. $m\overset{\frown}{PQR}$

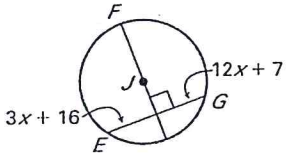


6. $m\overset{\frown}{KLM}$



Find the value of *x*.

7.



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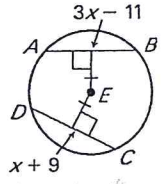
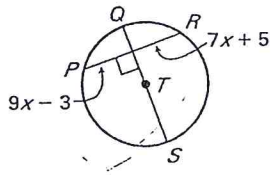
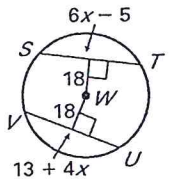


9.



10.



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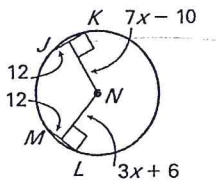

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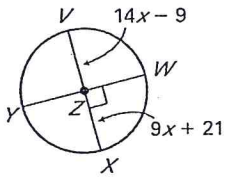
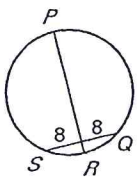


In Exercises 13–16, determine whether $\overline{PR}$ is a diameter of the circle.

13.



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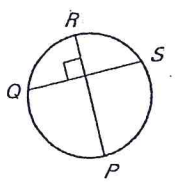

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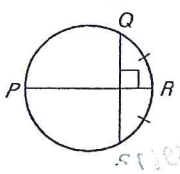

16.