

10.5

Name \_\_\_\_\_

1. Complete the square

$$x^2 + y^2 + 8x - 10y = 5$$

2. Change to degrees

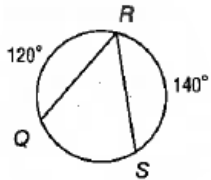
$$\frac{7\pi}{2} \text{ radians}$$

3. Change to radians

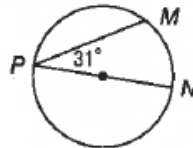
$$540 \text{ degrees}$$

4. Find the arc or angle.

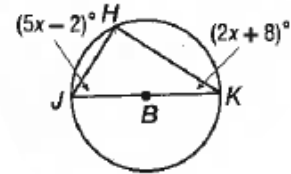
$m\angle R$



$m\widehat{MP}$

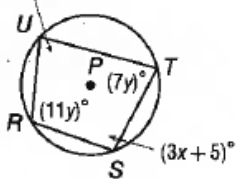


Find  $\angle J$  and  $\angle K$

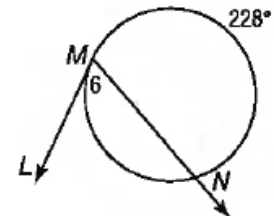
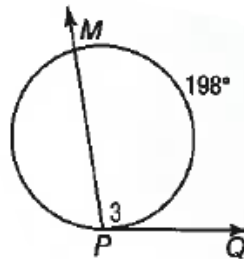
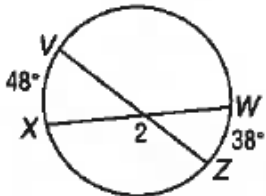


5. Find all four angles.

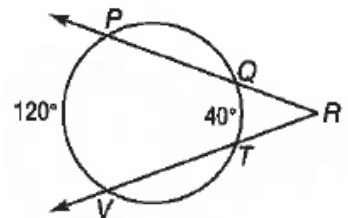
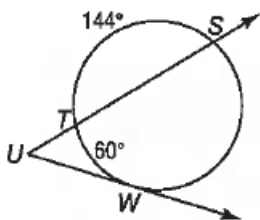
$(3x - 5)^\circ$



6. Find the numbered angle.

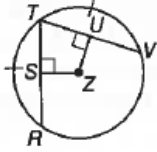


7.

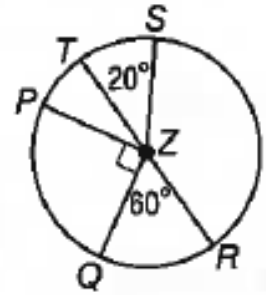


8. Name the 4 types of transformations. Circle the ones that are rigid motions.

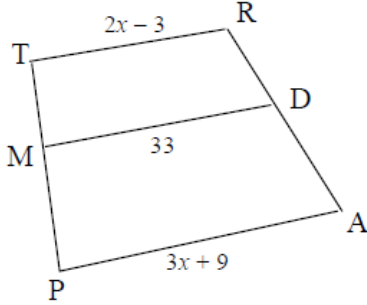
9. In  $\odot Z$ ,  $\widehat{TR} \cong \widehat{TV}$ ,  $SZ = x + 4$ , and  $UZ = 2x - 1$ . What is  $x$ ?



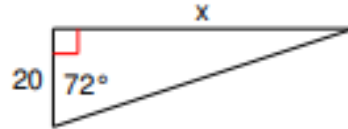
10. Find ALL arcs and angles.



11. Find  $x$ . Show work

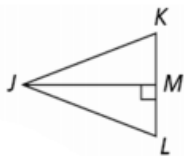


12. Find the missing side.



13. A puppy is looking up at the top of a treat on a table at an angle of elevation of 25 degrees. If the table is 3 feet tall, how far is the puppy from the treat? Show Work!

14. Given:  $\overline{JM}$  bisects  $\angle J$ .  $\overline{JM} \perp \overline{KL}$   
 Prove:  $\triangle JMK \cong \triangle JML$



15.  $\angle A$  and  $\angle B$  are complementary.  
 The sine of  $\angle A = 0.65$ . What is the cosine of  $\angle B$ ?

16. Find the equation of a line that is parallel to  $6x - 3y = 17$  and contains the point  $(8, -5)$ .