Secondary Math 2 HONORS Name_____

Unit 8 Lines, Angles, and Circles Review

Date_____ Period____

Find the other endpoint of the line segment with the given endpoint and midpoint.

1) Endpoint: $(-5, 3)$, midpoint: $(1, -10)$

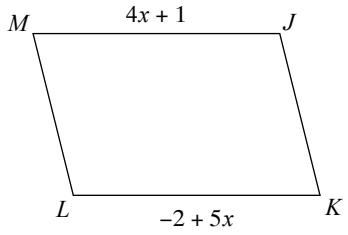
2) Endpoint: $(-8, 3)$, midpoint: $(1, -10)$

3) Given a segment with endpoints at $(-3, 7)$ and $(5, 23)$, find the point that partitions the segment in a 1:3 ratio.

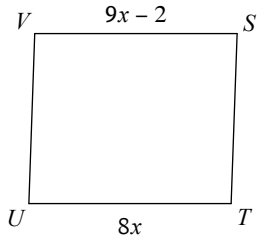
4) Given a segment with endpoints at $(10, -5)$ and $(-5, -30)$, find the point that partitions the segment in a 2:3 ratio.

Find the measurement indicated in each parallelogram.

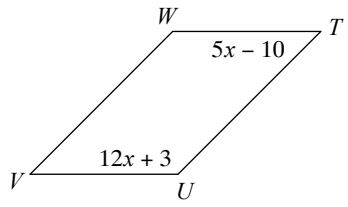
5) Find *KL*



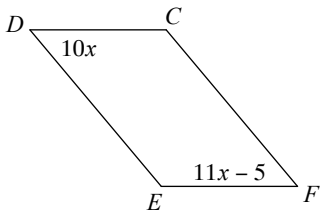
6) Find *TU*



7) Find $m\angle T$

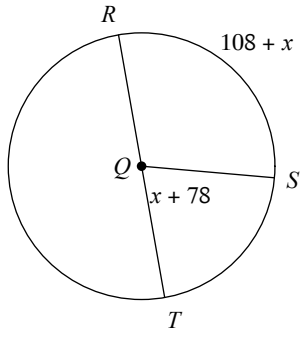


8) Find $m\angle C$

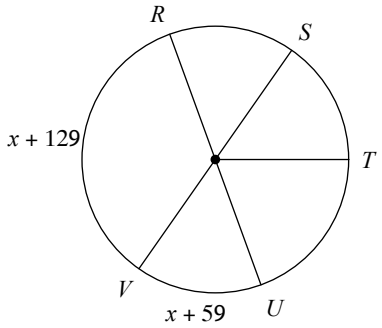


Find the measure of the arc or central angle indicated. Assume that lines which appear to be diameters are actual diameters.

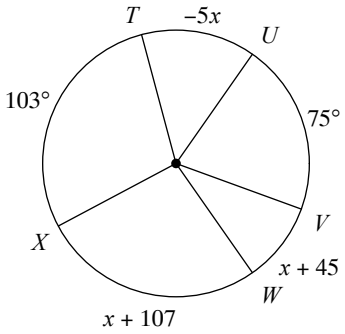
9) $m\angle RQS$



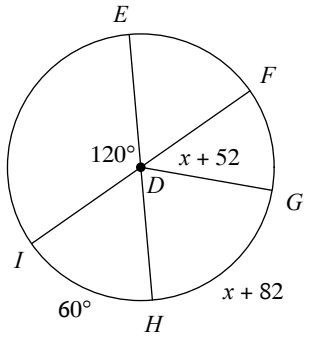
10) $m\overset{\frown}{VR}$



11) $m\overset{\frown}{TU}$

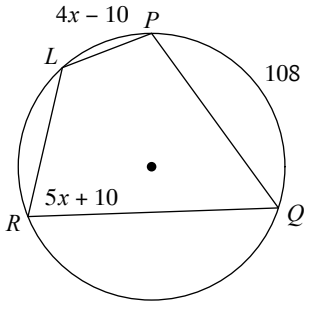


12) $m\angle GDH$

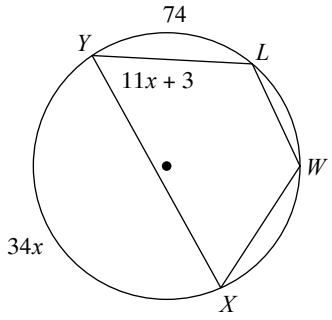


Find the measure of the arc or angle indicated.

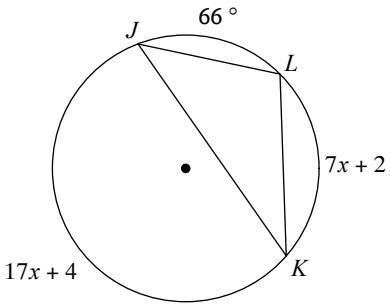
13) Find $m\overset{\frown}{LP}$



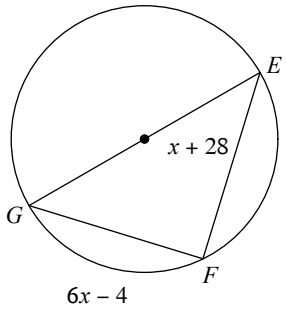
14) Find $m\overset{\frown}{YLX}$



15) Find $m\widehat{JLK}$



16) Find $m\angle GEF$



Convert each degree measure into radians and each radian measure into degrees.

17) $\frac{5\pi}{3}$

18) 30°

19) $\frac{3\pi}{2}$

20) 100°

Find the exact value of each trigonometric function.

21) $\tan\frac{2\pi}{3}$

22) $\cos\frac{\pi}{6}$

23) cos 330°

24) sin 225°

25) $\sin\frac{5\pi}{3}$

26) sin 135°

27) $\cos\frac{\pi}{3}$

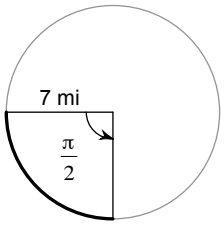
28) $\tan\frac{7\pi}{6}$

29) $\tan\frac{5\pi}{4}$

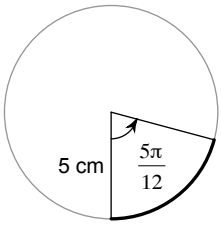
30) tan 90°

Find the arc length and sector area for each question.

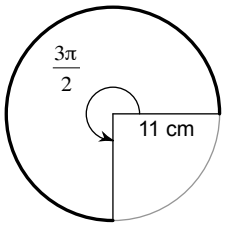
31)



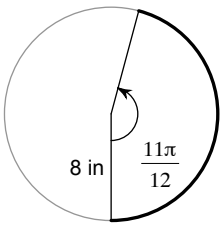
32)



33)

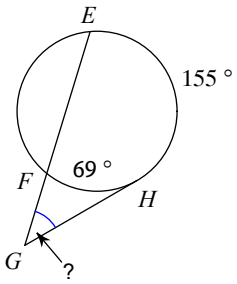


34)



Find the measure of the arc or angle indicated. Assume that lines which appear tangent are tangent.

35)



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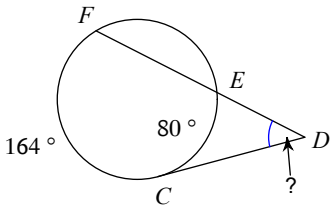
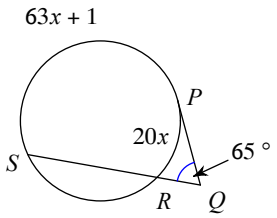
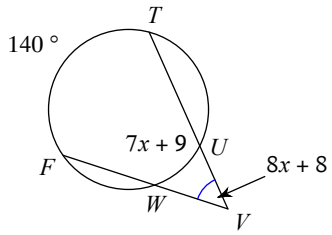


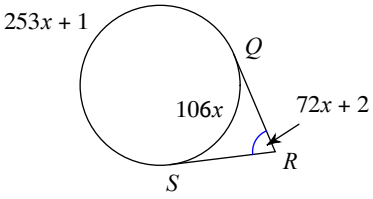
37) Find $m\widehat{SR}$



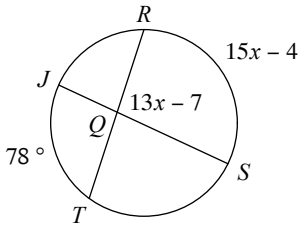
38) Find $m\widehat{UW}$



39) Find $m\angle QRS$

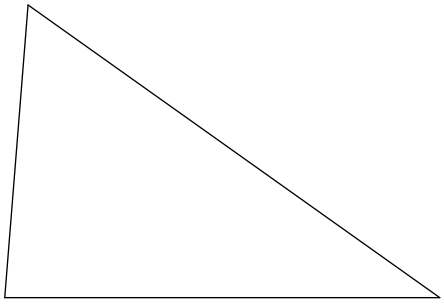


40) Find $m\widehat{RS}$

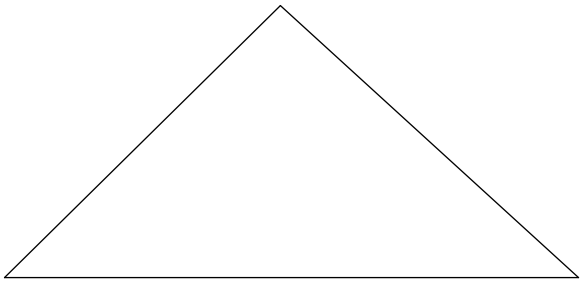


Circumscribe a circle about each triangle.

41)

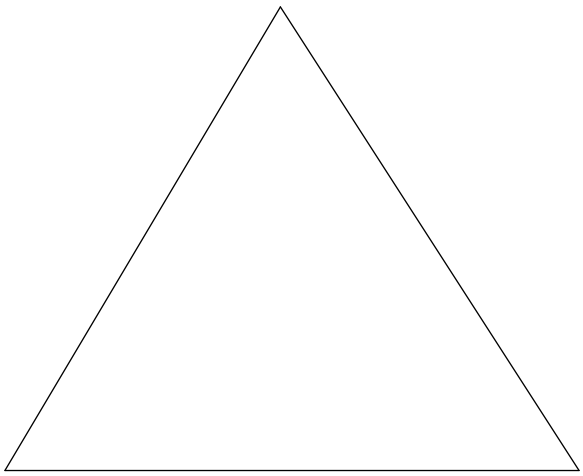


42)



Inscribe a circle in each triangle.

43)



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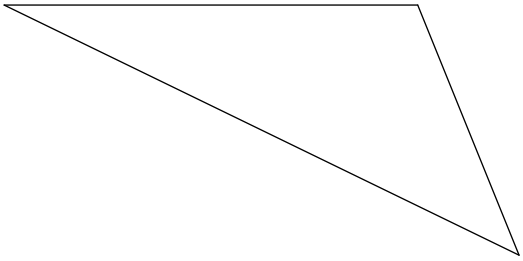
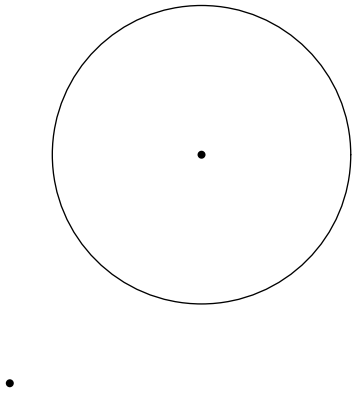


Construct a line segment tangent to the circle through the point given.

45)



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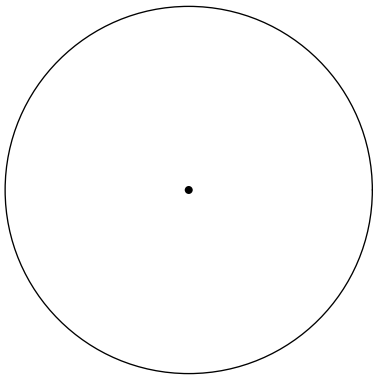
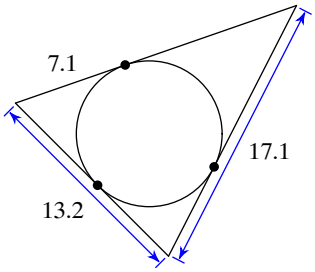
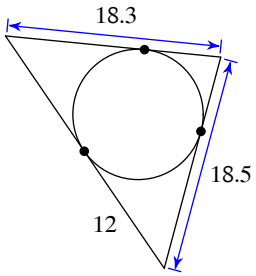


Find the perimeter of each polygon. Assume that lines which appear to be tangent are tangent.

47)

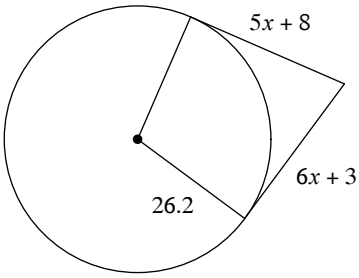


48)

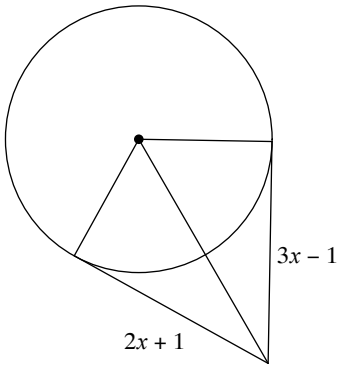


Solve for *x*. Assume that lines which appear to be tangent are tangent.

49)

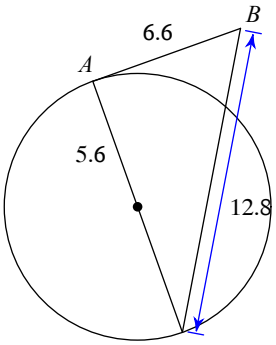


50)

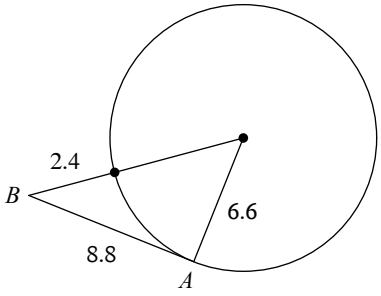


Determine if line AB is tangent to the circle.

51)



52)



53) What is a radian?

54) Explain where the formula for circumference comes from.