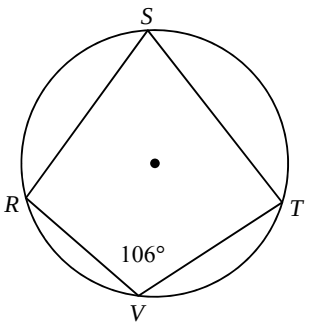
Geometry Name_____

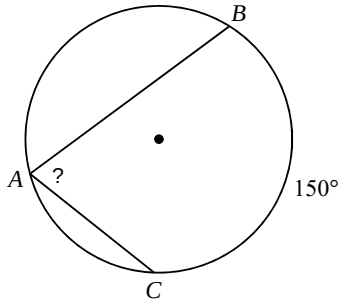
Review Unit 11

Find the measure of the arc or angle indicated.

1) Find $m\widehat{RST}$

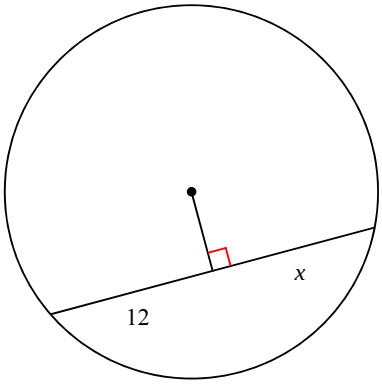


2)



Find the length of the segment indicated. Round your answer to the nearest tenth if necessary.

3)



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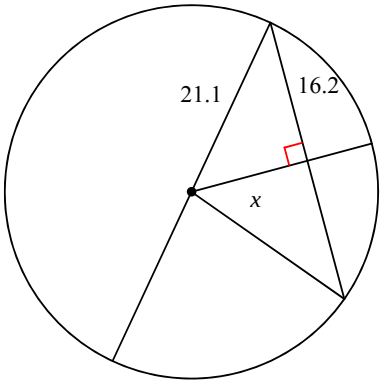
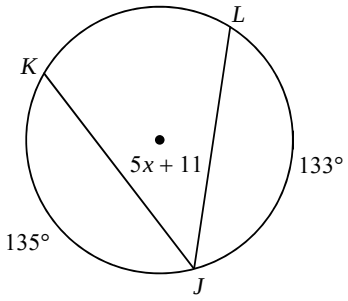
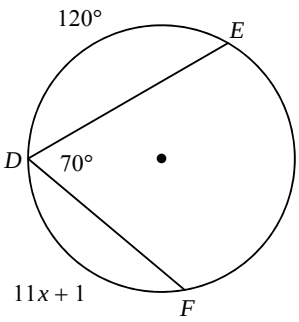


Solve for *x*.

5)

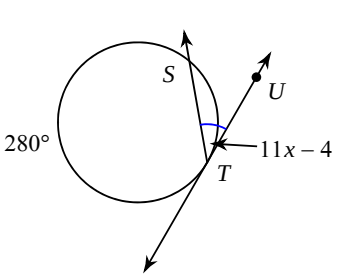


6)



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

7)



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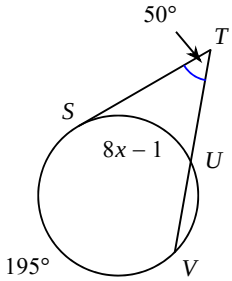

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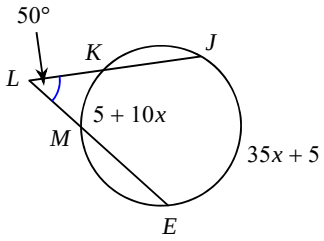

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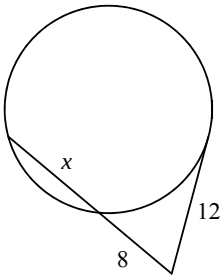

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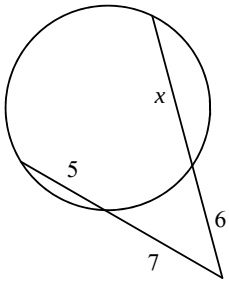
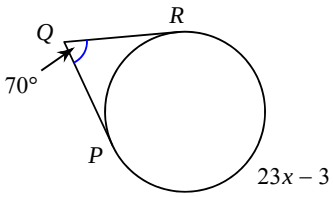


12)



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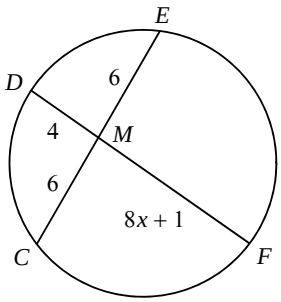
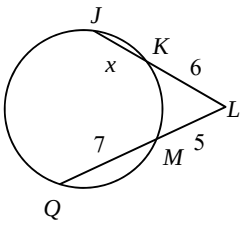
Find the measure of the line segment indicated. Assume that lines which appear tangent are tangent.

13) Find *DF*



14) Find *JL*



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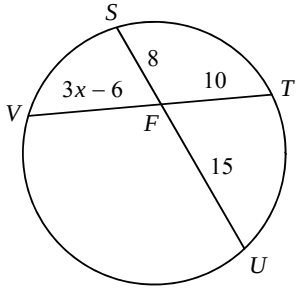
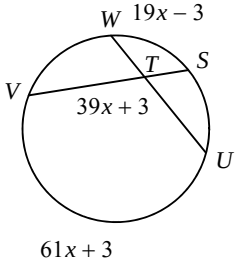
15) Find *FV*



16) Find $m\angle UTV$



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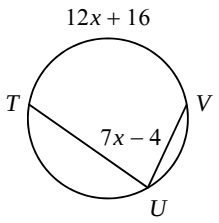
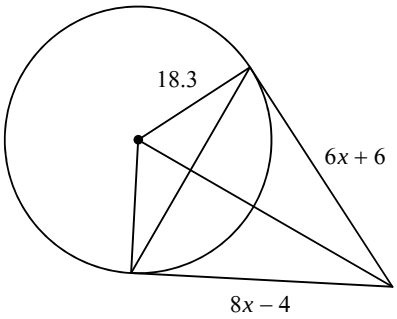
17) Find $m\angle VUT$



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

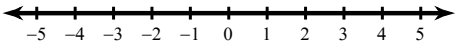
18)



ALGEBRA REVIEW!!!

Solve each inequality and graph its solution.

19) $4 - 4p \le 4(p - 1)$



Solve each equation.

20) $-2(4 + 2x) = -8 + x$

Factor each completely.

21) $10n^2 + 26n + 12$

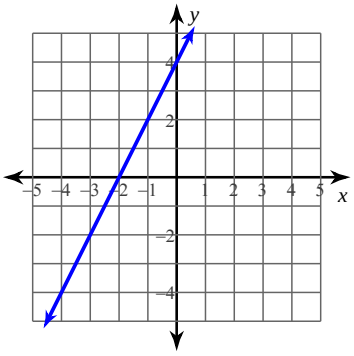
22) $16p^2 - 9$

Solve each system by substitution.

23) $y = -6x - 16$
$-4x + 3y = 18$

Write the slope-intercept form of the equation of each line.

24)



11 Review Application and Extension

1. A chord of 30cm is 7cm from the center of a circle. **Calculate the area** of the circle to the nearest tenth. (+4)

2. Sully is riding in an airplane at an altitude of about 5.5 mi above the Earth. **How far is Sully from the furthest point on Earth that he can see**? Remember, the Earth's diameter is approximately 7920 miles. (+4)

3. The diameter of a circle is 50cm and a chord that is parallel to that diameter is 32cm. To the nearest tenth, **what is the distance** to the chord from the center of the circle? (+4)

4. Brust is chill-axin' up in a hot-air balloon. He estimates the viewing angle of the Earth formed by two tangents of 120°.

a. Draw a picture to represent the scenario here (+2) →

b. Find the **measure of the arc** of Earth's surface viewable from the balloon. (+3)

c. If the radius of the Earth is about 3960 miles, calculate the **distance from the earth's surface to the balloon to the nearest mile**.(+3)