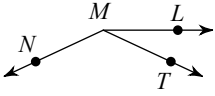
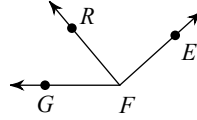


9th Grade Summer Assignment

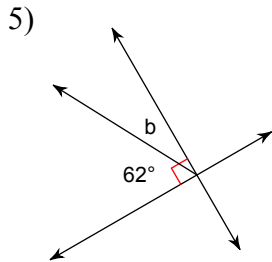
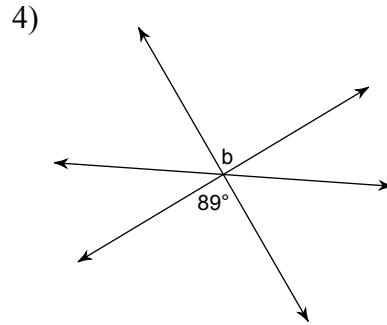
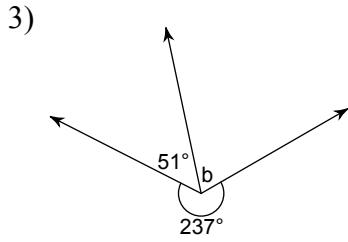
- 1) Find x if $m\angle LMN = 155^\circ$,
 $m\angle TMN = x + 140$, and $m\angle LMT = x + 35$.



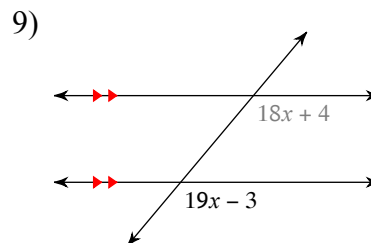
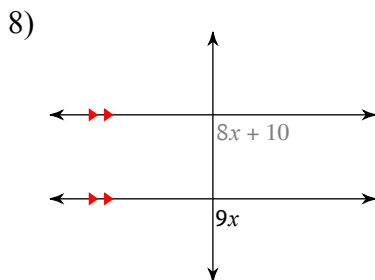
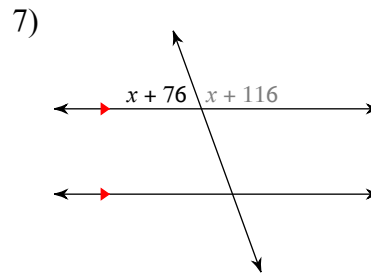
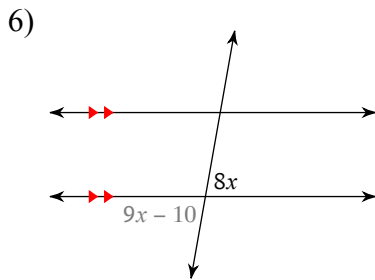
- 2) Find x if $m\angle GFR = 8x - 6$,
 $m\angle RFE = 88^\circ$, and $m\angle GFE = 18x + 12$.



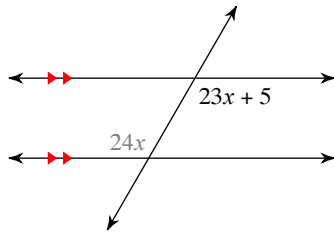
Find the measure of angle b .



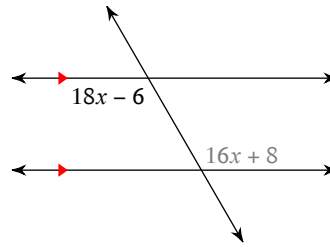
Find the measure of the angle indicated in bold.



10)

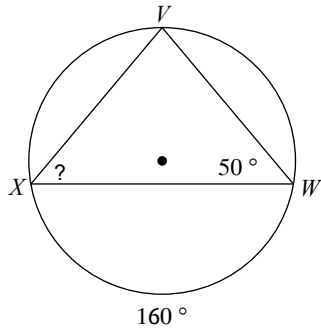


11)

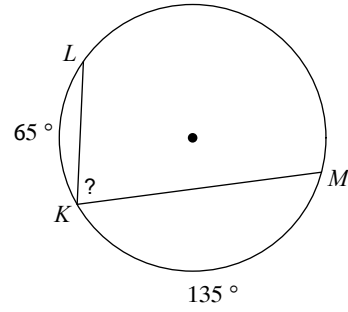


Find the measure of the arc or angle indicated.

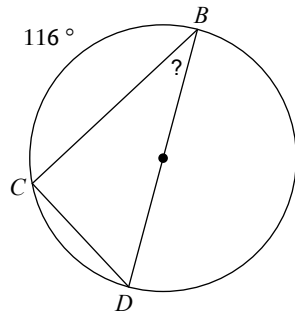
12)



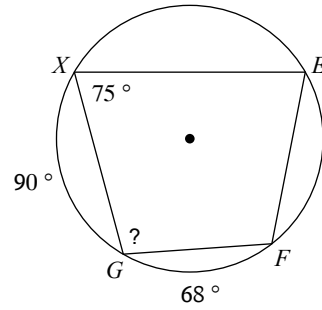
13)



14)

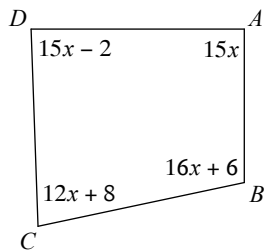


15)



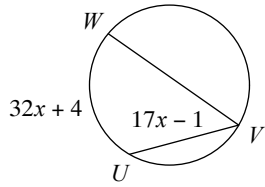
Find the measure of each angle indicated.

16) $m\angle A$

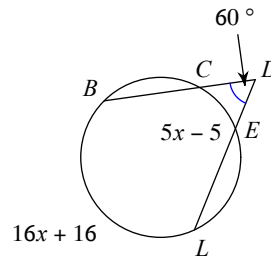


Find the measure of the arc or angle indicated. Assume that lines which appear tangent are tangent.

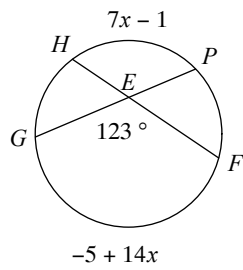
17) Find $m\widehat{WU}$



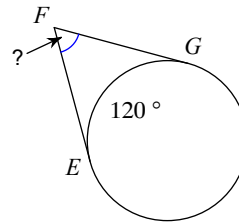
18) Find $m\widehat{LB}$



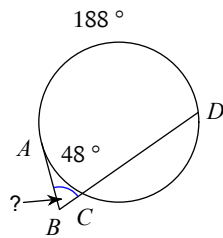
19) Find $m\widehat{FG}$



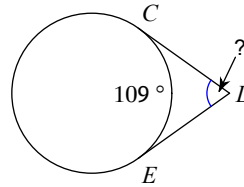
20)



21)

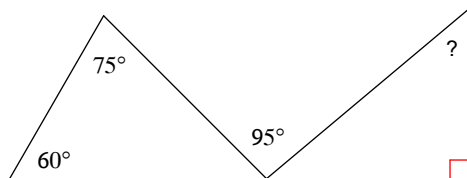


22)

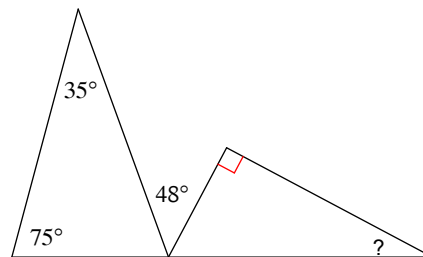


Find the measure of each angle indicated.

23)

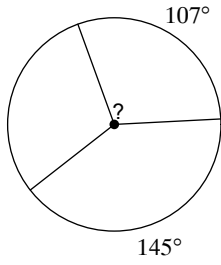


24)

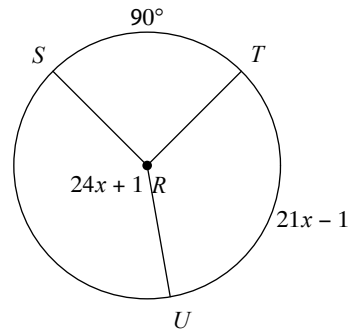


Find the measure of the arc or central angle indicated. Assume that lines which appear to be diameters are actual diameters.

25)

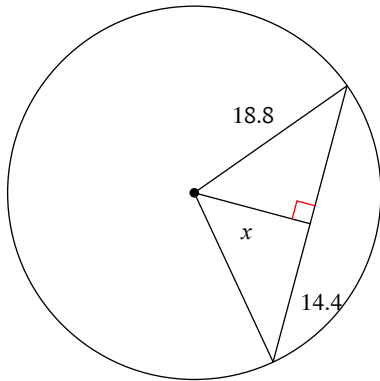


26) $m\angle TRU$

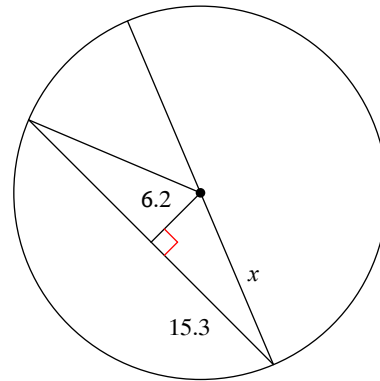


Find the length of the segment indicated. Round your answer to the nearest tenth if necessary.

27)

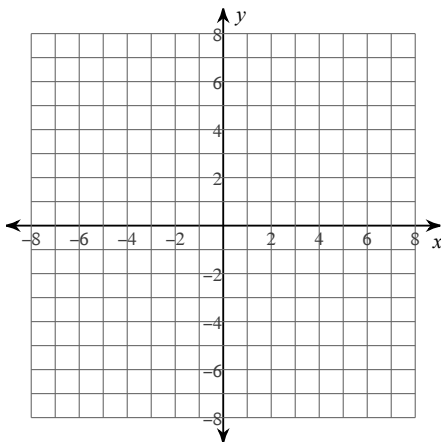


28)



Identify the center and radius of each. Then sketch the graph.

29) $(x - 2)^2 + (y + 2)^2 = 25$

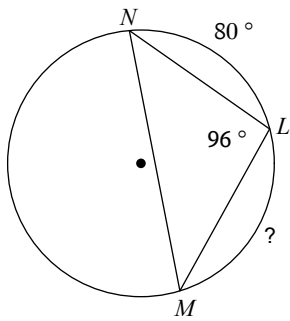


Use the information provided to write the equation of each circle.

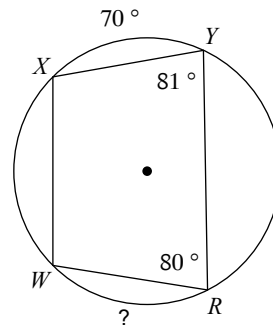
- 30) Center: $(-6, 12)$
 Radius: $\sqrt{29}$

Find the measure of the arc or angle indicated.

31)

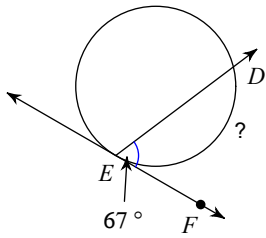


32)

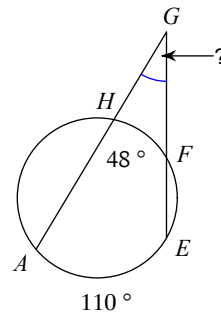


Find the measure of the arc or angle indicated. Assume that lines which appear tangent are tangent.

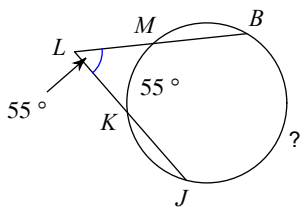
33)



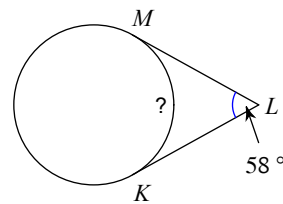
34)



35)

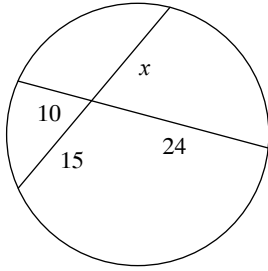


36)

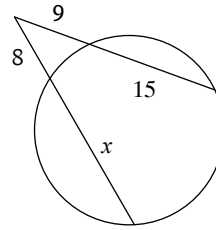


Solve for x . Assume that lines which appear tangent are tangent.

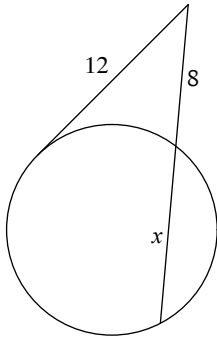
37)



38)

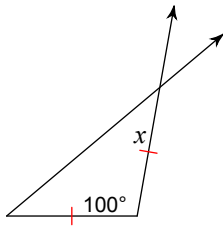


39)



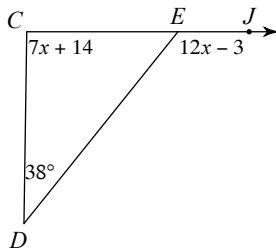
Find the value of x .

40)



Solve for x .

41)



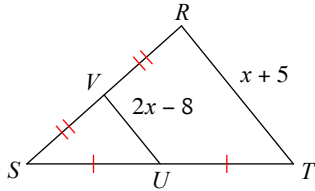
Find the other endpoint of the line segment with the given endpoint and midpoint.

47) Endpoint: $(3, -3)$, midpoint: $(-6, -2)$

48) Endpoint: $(7, 6)$, midpoint: $(-9, 10)$

Solve for x .

49)



Find the slope of a line parallel to each given line.

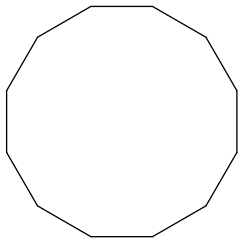
50) $y = -\frac{3}{2}x + 5$

Find the slope of a line perpendicular to each given line.

51) $y = -x - 2$

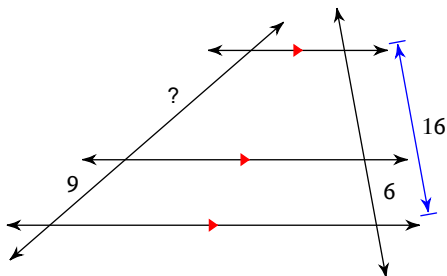
Find the interior angle sum for each polygon. Round your answer to the nearest tenth if necessary.

52)

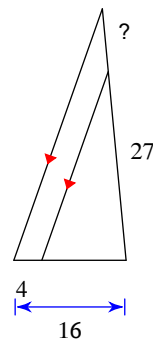


Find the missing length indicated.

53)

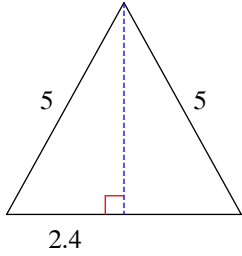


54)

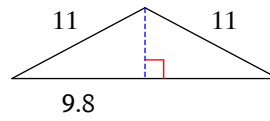


Find the area of each triangle. Round intermediate values to the nearest tenth. Use the rounded values to calculate the next value. Round your final answer to the nearest tenth.

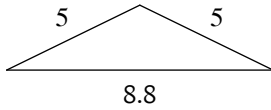
55)



56)

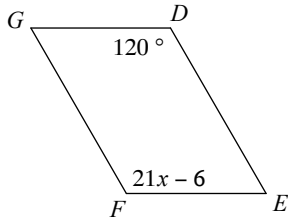


57)

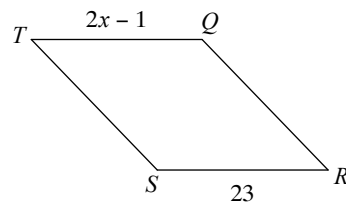


Solve for x . Each figure is a parallelogram.

58)

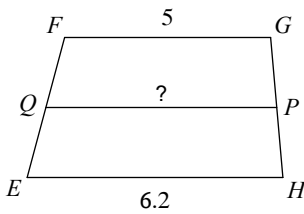


59)



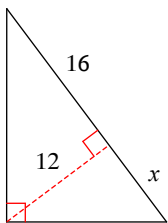
Find the length of the median of each trapezoid.

60)

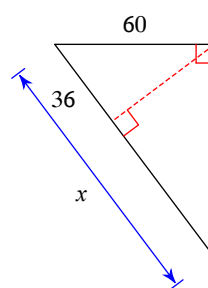


Find the missing length indicated. Leave your answer in simplest radical form.

61)

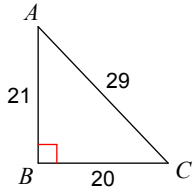


62)



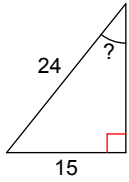
Find the value of each trigonometric ratio.

63) $\sin C$



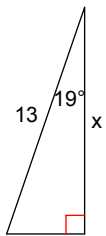
Find the measure of the indicated angle to the nearest degree.

64)

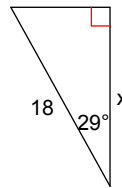


Find the missing side. Round to the nearest tenth.

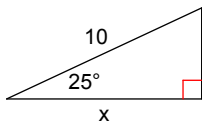
65)



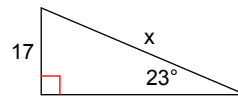
66)



67)

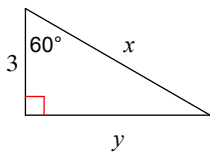


68)

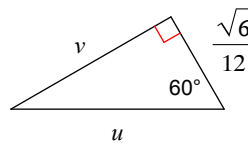


Find the missing side lengths. Leave your answers as radicals in simplest form.

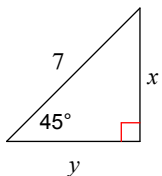
69)



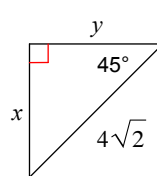
70)



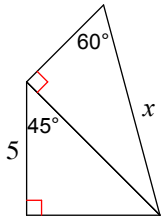
71)



72)

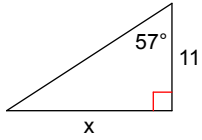


73)

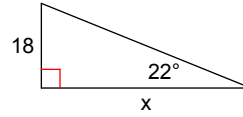


Find the missing side. Round to the nearest tenth.

74)

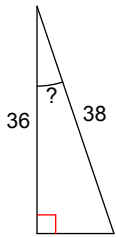


75)

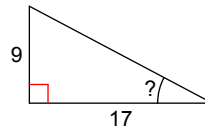


Find the measure of the indicated angle to the nearest degree.

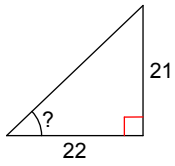
76)



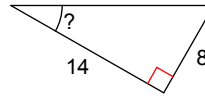
77)



78)



79)



80)

