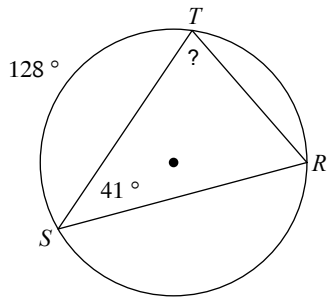
Geometry Name_____ ID: 1

Chapter 14: Circle Relationships

Date_____ Period____

Find the measure of the arc or angle indicated.

1)



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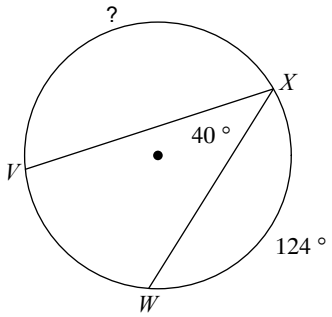

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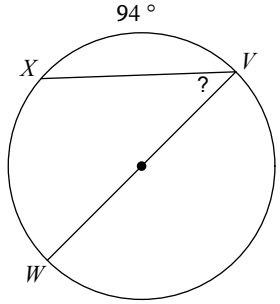

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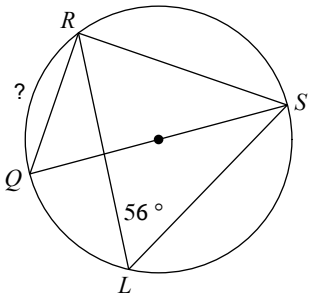

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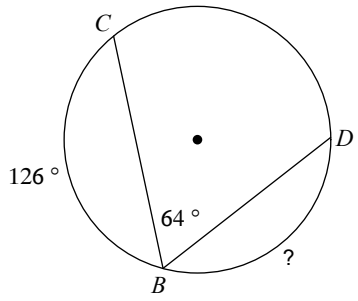

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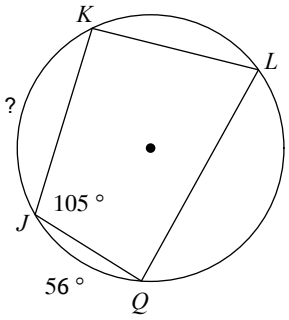
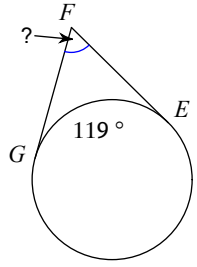


Find the measure of the arc or angle indicated. Assume that lines which appear tangent are tangent.

7)



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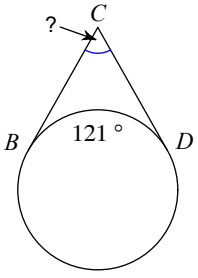

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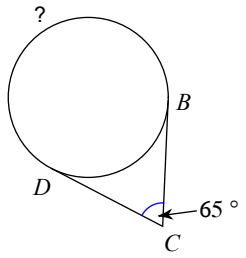

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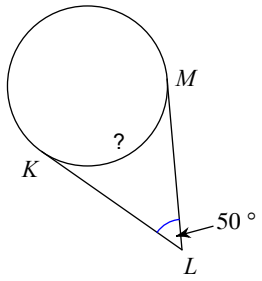

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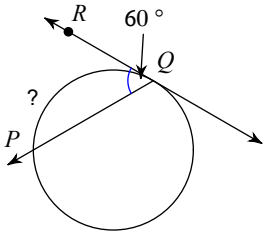

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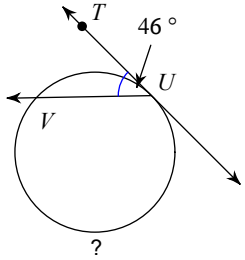

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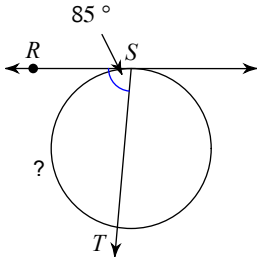

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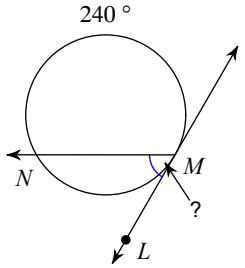

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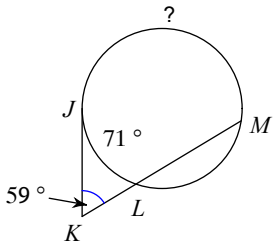

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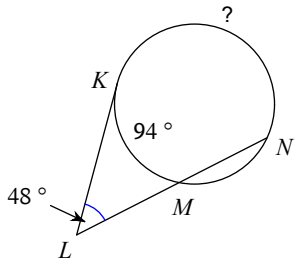

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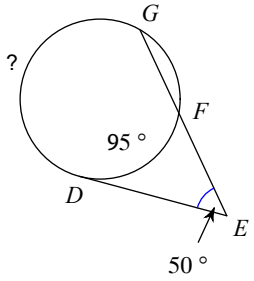

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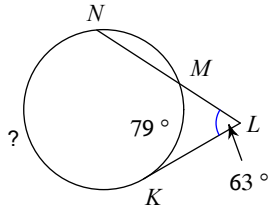

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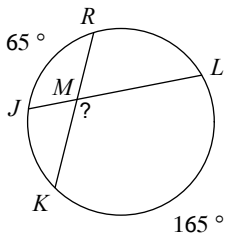

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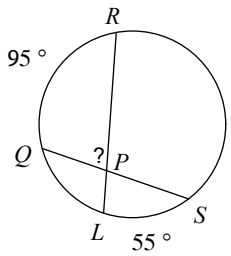

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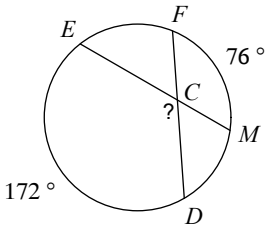

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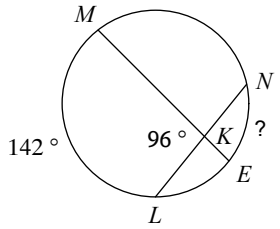

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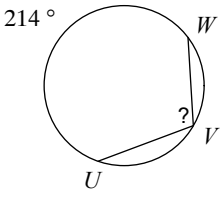

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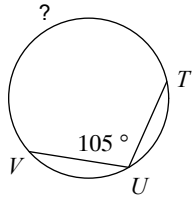

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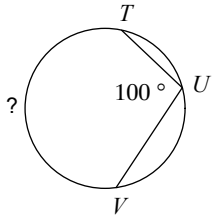

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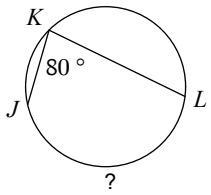

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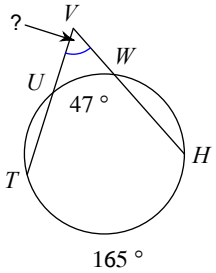

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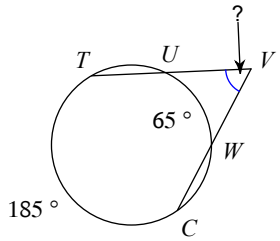

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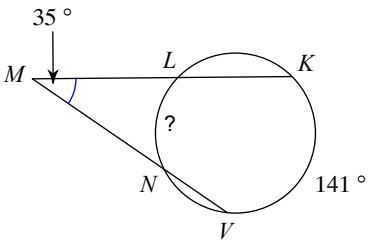

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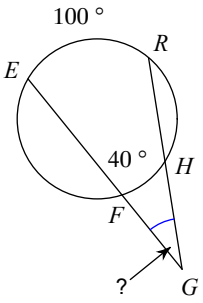
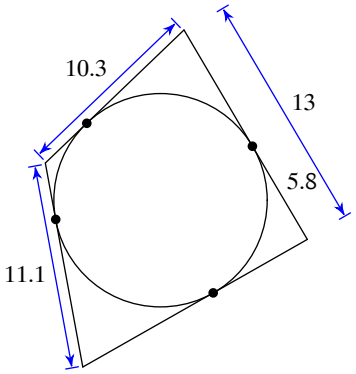


Find the perimeter of each polygon. Assume that lines which appear to be tangent are tangent.

31)



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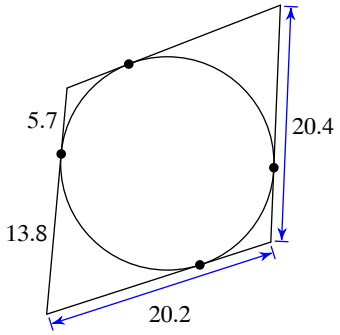

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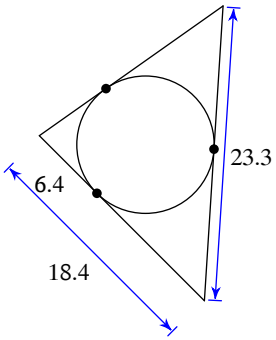

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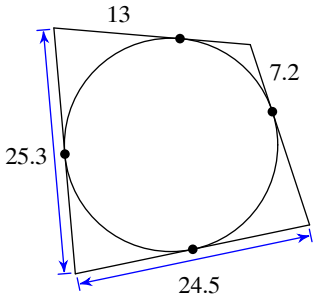

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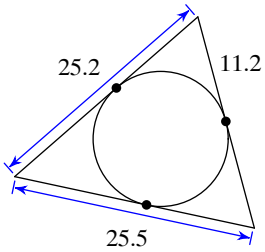

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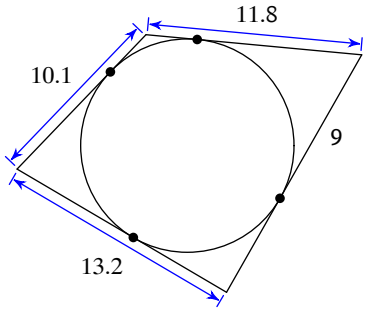
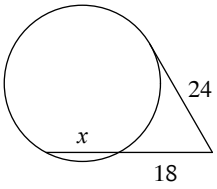


Solve for *x*. Assume that lines which appear tangent are tangent.

37)



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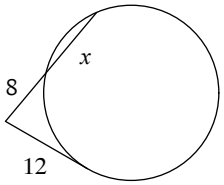

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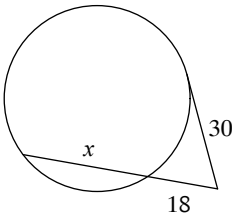

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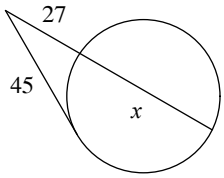

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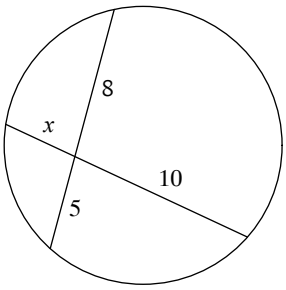

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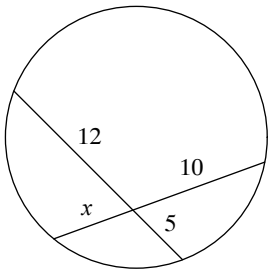

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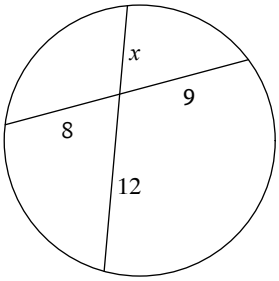

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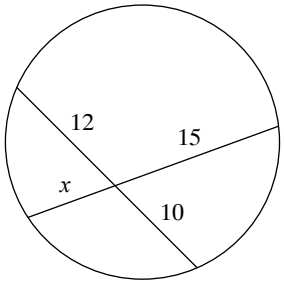

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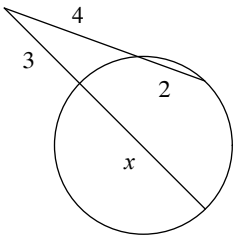

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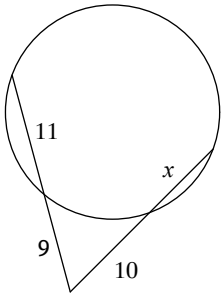

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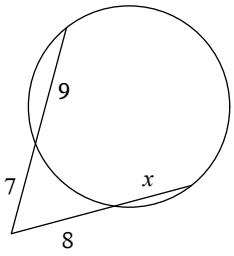

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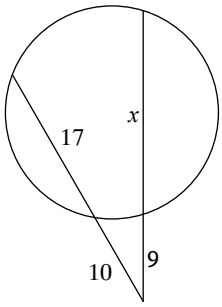
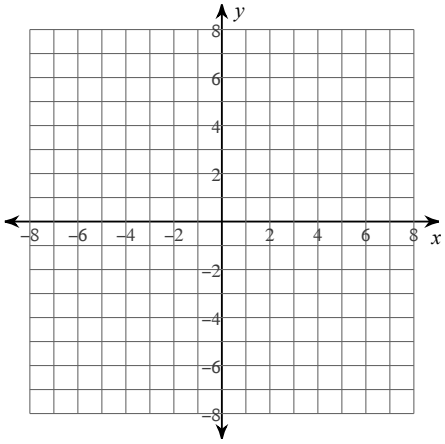
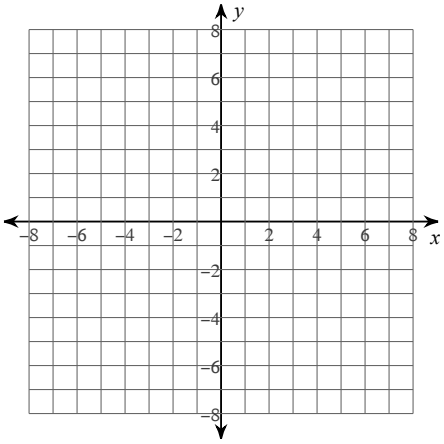


Identify the center and radius of each. Then sketch the graph.

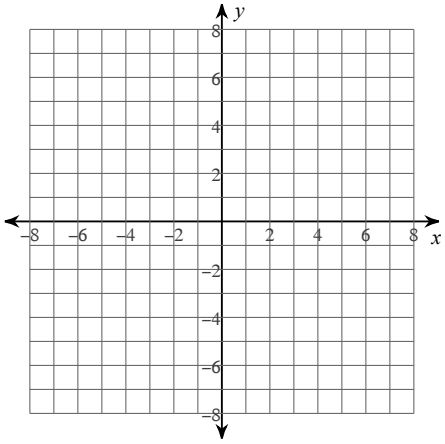
49) $x^2 + (y-1)^2 = 9$



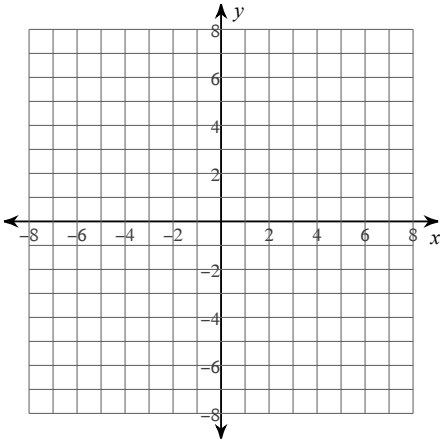
50) $(x-3)^2 + (y+2)^2 = 9$



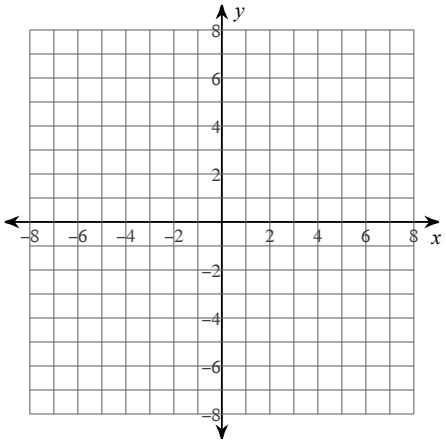
51) $x^2 + (y+2)^2 = 16$



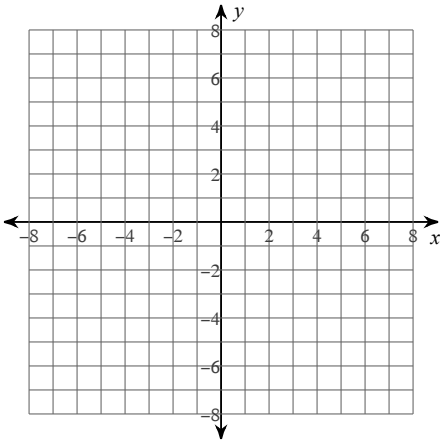
52) $(x-3)^2 + (y-3)^2 = 5$



53) $(x-3)^2+(y+2)^2=16$



54) $(x-2)^2+(y-4)^2=9$



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

55) Center: $(5, -6)$
Radius: $\sqrt{74}$

56) Center: $(15, 8)$
Radius: 2

57) Center: $(-10, -6)$
Radius: $\sqrt{73}$

58) Center: $(-16, -13)$
Radius: 1

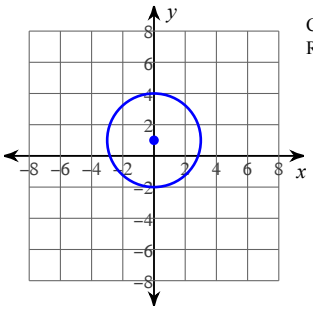
59) Center: $(7, -16)$
Radius: 1

60) Center: $(-10, -8)$
Radius: 4

Answers to Chapter 14: Circle Relationships (ID: 1)

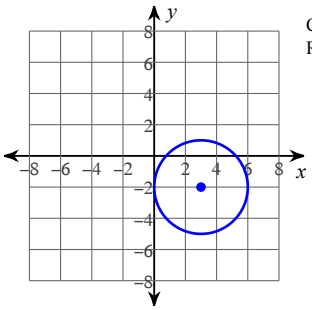
1) 75°
2) 156°
3) 43°
4) 68°
5) 106°
6) 94°
7) 61°
8) 59°
9) 245°
10) 130°
11) 120°
12) 268°
13) 170°
14) 60°
15) 189°
16) 190°
17) 195°
18) 205°
19) 115°
20) 75°
21) 124°
22) 50°
23) 107°
24) 210°
25) 200°
26) 160°
27) 59°
28) 60°
29) 71°
30) 30°
31) 48.2
32) 79.8
33) 59.4
34) 89.4
35) 73.4
36) 50
37) 14
38) 10
39) 32
40) 48
41) 4
42) 6
43) 6
44) 8
45) 5
46) 8
47) 6
48) 21

49)



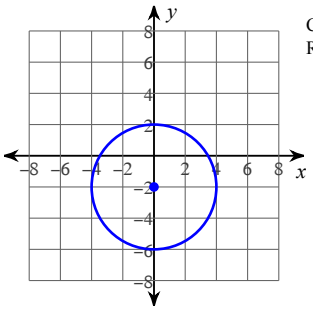
Center: (0, 1)
Radius: 3

50)



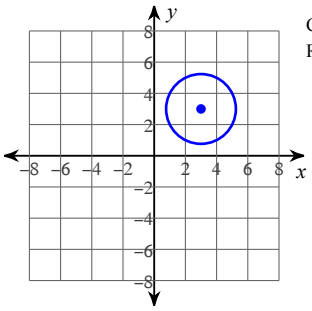
Center: (3, –2)
Radius: 3

51)



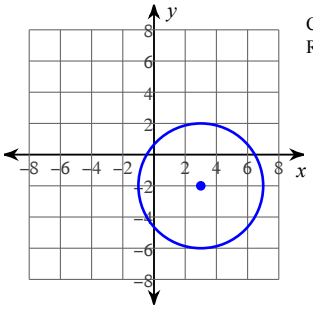
Center: (0, –2)
Radius: 4

52)



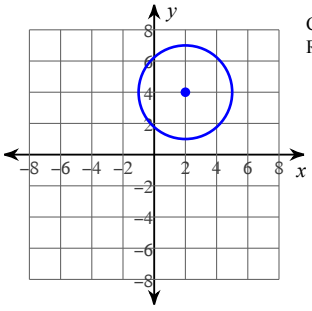
Center: (3, 3)
Radius: $\sqrt{5}$

53)



Center: (3, –2)
Radius: 4

54)



Center: (2, 4)
Radius: 3

55) $(x-5)^2+(y+6)^2=74$
56) $(x-15)^2+(y-8)^2=4$
57) $(x+10)^2+(y+6)^2=73$
58) $(x+16)^2+(y+13)^2=1$
59) $(x-7)^2+(y+16)^2=1$
60) $(x+10)^2+(y+8)^2=16$