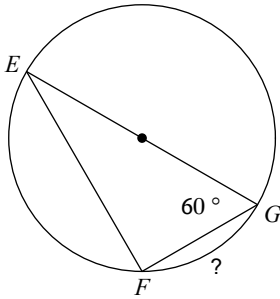


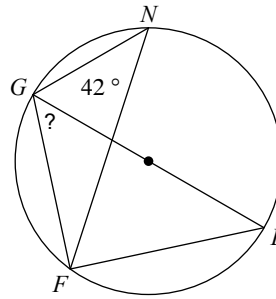
Chapter 14: Circle Relationships

Find the measure of the arc or angle indicated.

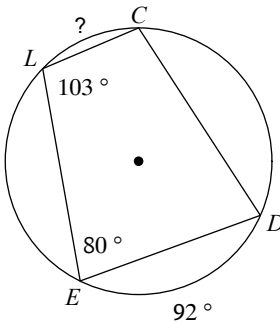
1)



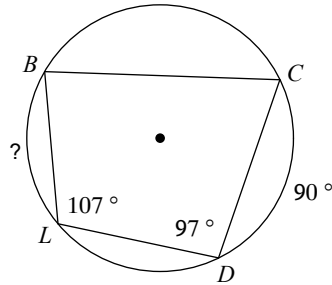
2)



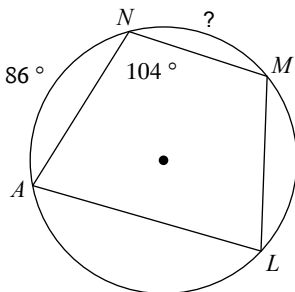
3)



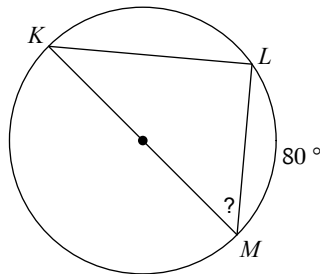
4)



5)

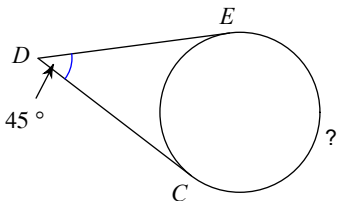


6)

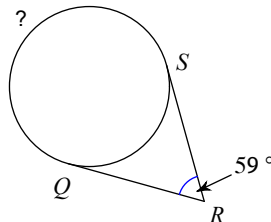


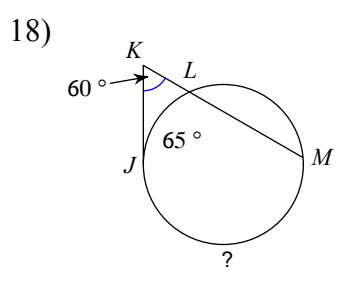
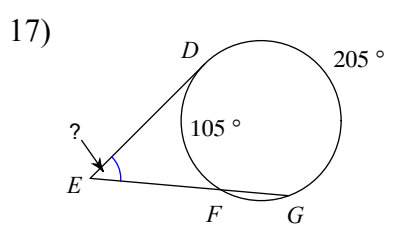
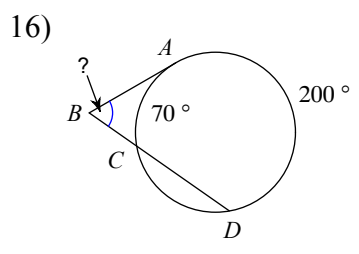
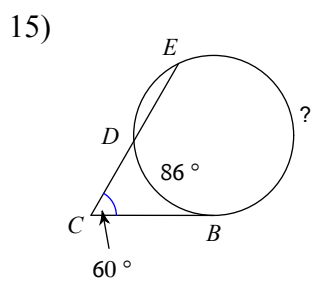
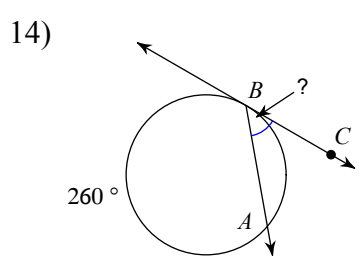
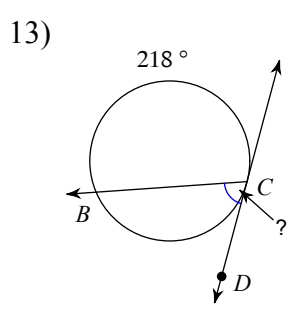
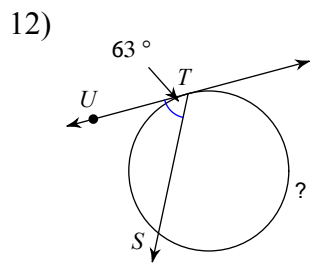
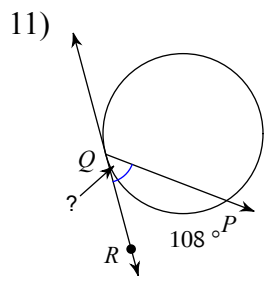
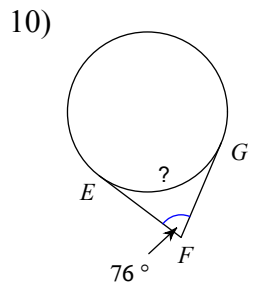
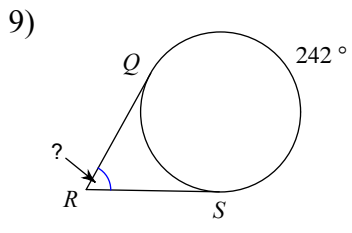
Find the measure of the arc or angle indicated. Assume that lines which appear tangent are tangent.

7)

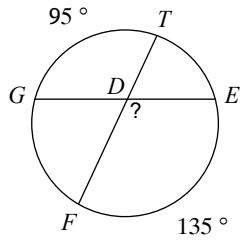


8)

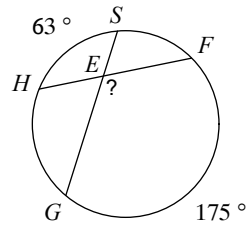




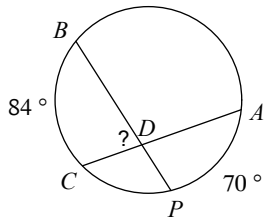
19)



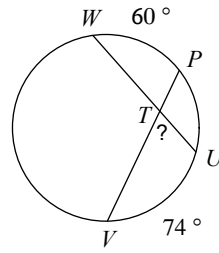
20)



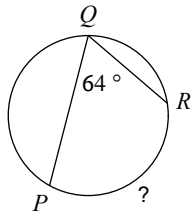
21)



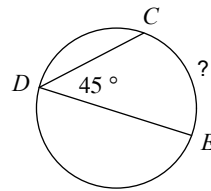
22)



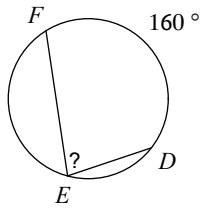
23)



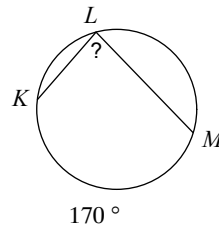
24)



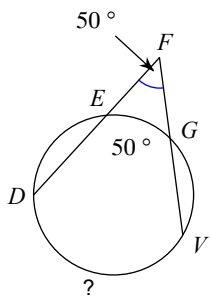
25)



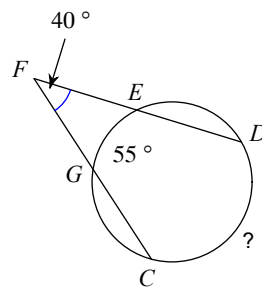
26)



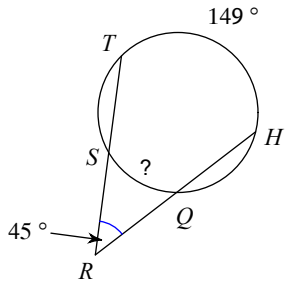
27)



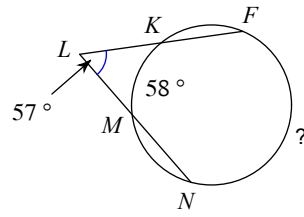
28)



29)

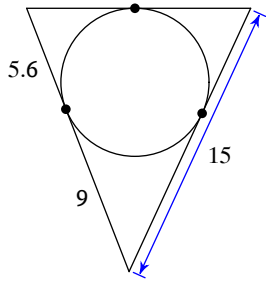


30)

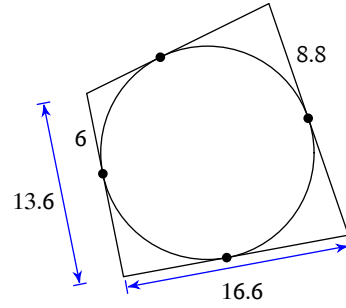


Find the perimeter of each polygon. Assume that lines which appear to be tangent are tangent.

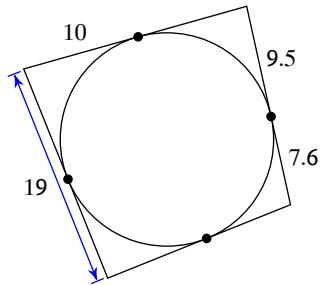
31)



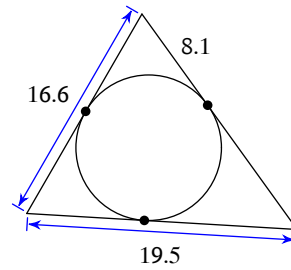
32)



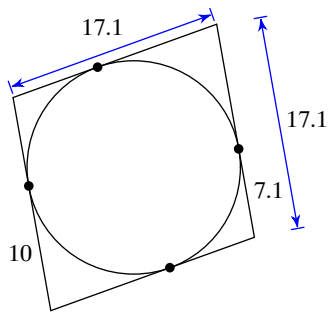
33)



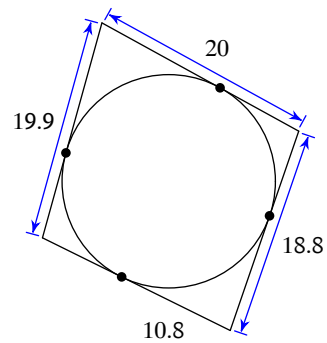
34)



35)

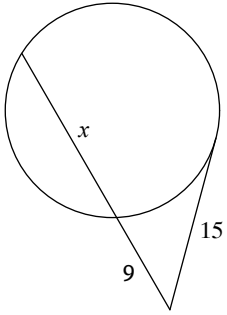


36)

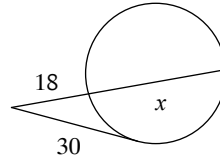


Solve for x . Assume that lines which appear tangent are tangent.

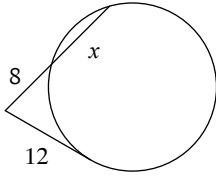
37)



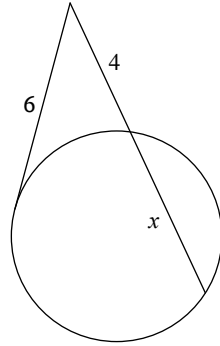
38)



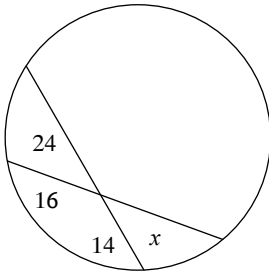
39)



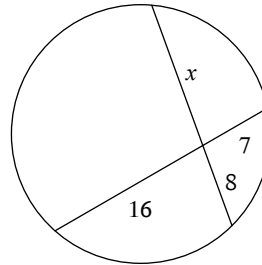
40)



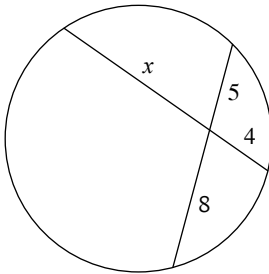
41)



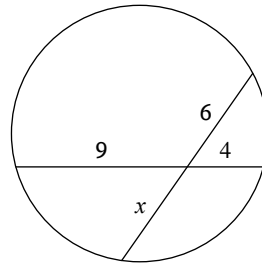
42)



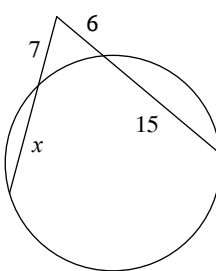
43)



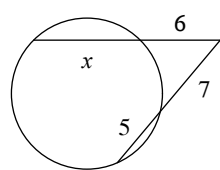
44)



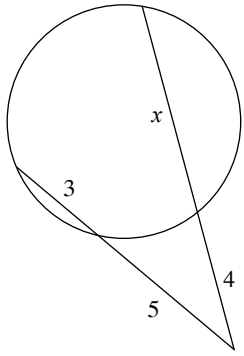
45)



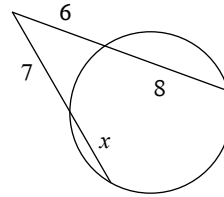
46)



47)

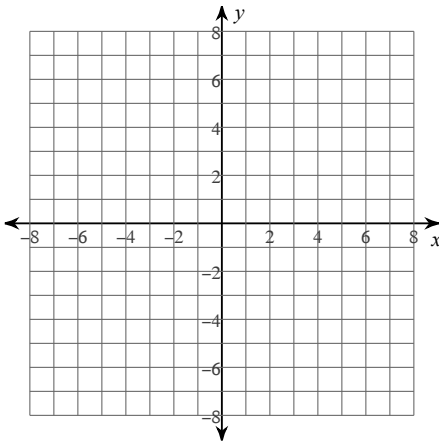


48)

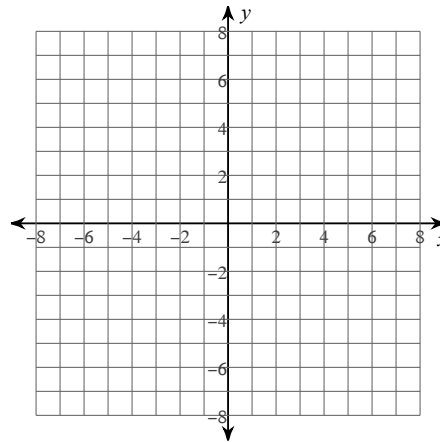


Identify the center and radius of each. Then sketch the graph.

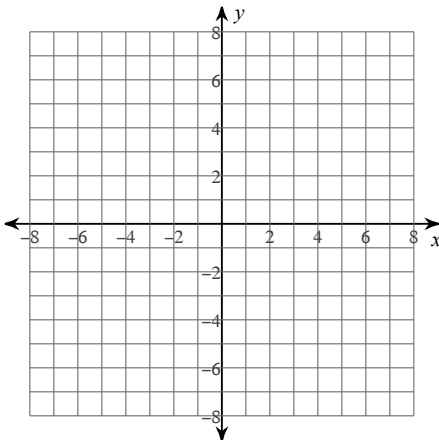
49) $(x - 3)^2 + (y - 2)^2 = 4$



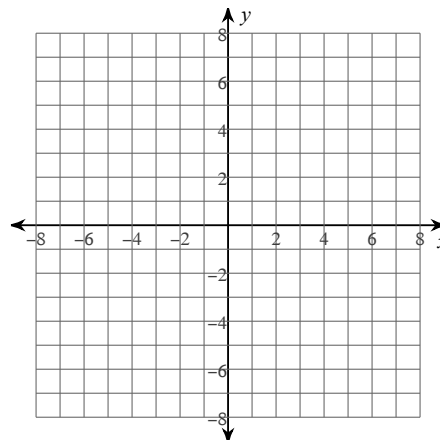
50) $x^2 + (y - 2)^2 = 4$



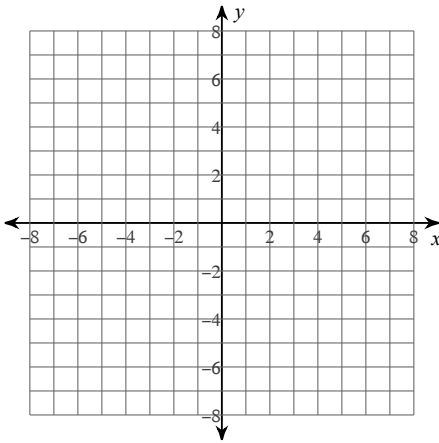
51) $(x - 2)^2 + (y - 2)^2 = 1$



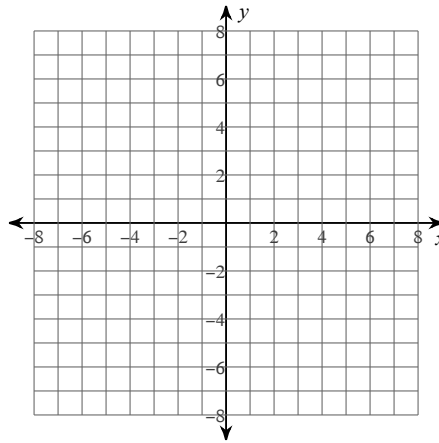
52) $\left(x + \frac{7}{2}\right)^2 + \left(y + \frac{5}{2}\right)^2 = 9$



$$53) (x + 2)^2 + (y + 2)^2 = 25$$



$$54) (x + 2)^2 + (y - 1)^2 = 25$$



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

55) Center: $(1, -10)$
 Radius: 5

56) Center: $(15, -1)$
 Radius: 3

57) Center: $(-5, -9)$
 Radius: $4\sqrt{2}$

58) Center: $(-10, 16)$
 Radius: 3

59) Center: $(-1, -7)$
 Radius: 9

60) Center: $\left(\frac{25}{2}, -13\right)$
 Radius: 4

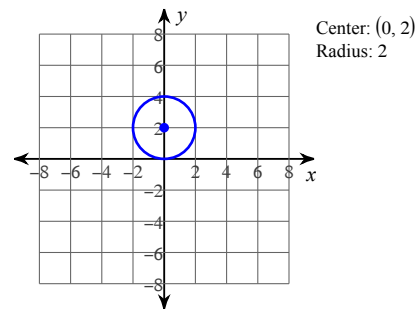
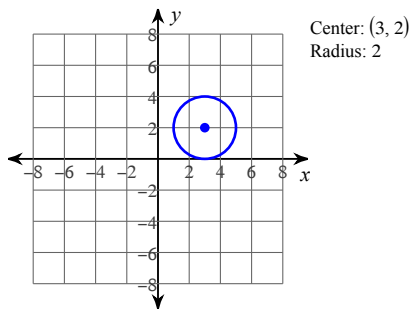
Answers to Chapter 14: Circle Relationships (ID: 2)

- 1) 60°
- 5) 66°
- 9) 62°
- 13) 71°
- 17) 50°
- 21) 77°
- 25) 80°
- 29) 59°
- 33) 72.2
- 37) 16
- 41) 21
- 45) 11
- 49)

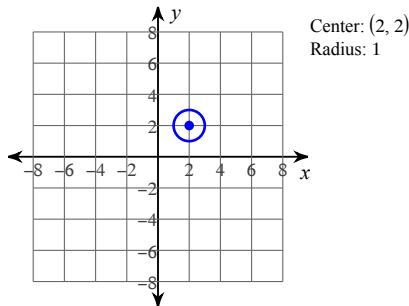
- 2) 48°
- 6) 50°
- 10) 104°
- 14) 50°
- 18) 185°
- 22) 67°
- 26) 85°
- 30) 172°
- 34) 55.2
- 38) 32
- 42) 14
- 46) 8

- 3) 46°
- 7) 225°
- 11) 54°
- 15) 206°
- 19) 115°
- 23) 128°
- 27) 150°
- 31) 41.2
- 35) 68.4
- 39) 10
- 43) 10
- 47) 6
- 50)

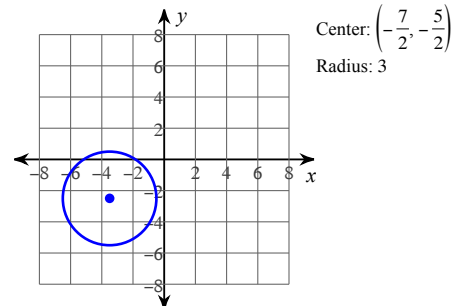
- 4) 70°
- 8) 239°
- 12) 234°
- 16) 65°
- 20) 119°
- 24) 90°
- 28) 135°
- 32) 62.8
- 36) 77.4
- 40) 5
- 44) 6
- 48) 5



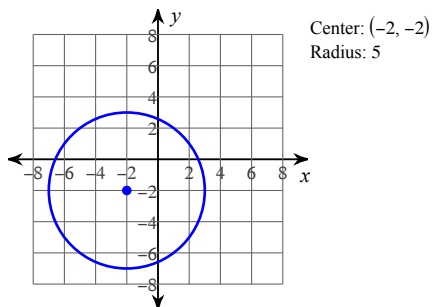
51)



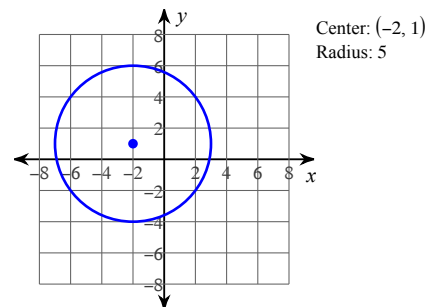
52)



53)



54)



55) $(x - 1)^2 + (y + 10)^2 = 25$

56) $(x - 15)^2 + (y + 1)^2 = 9$

57) $(x + 5)^2 + (y + 9)^2 = 32$

58) $(x + 10)^2 + (y - 16)^2 = 9$

59) $(x + 1)^2 + (y + 7)^2 = 81$

60) $(x - \frac{25}{2})^2 + (y + 13)^2 = 16$