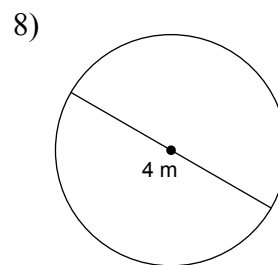
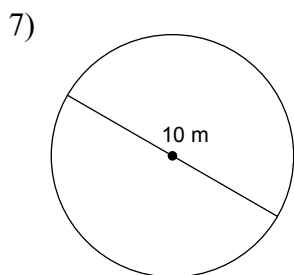
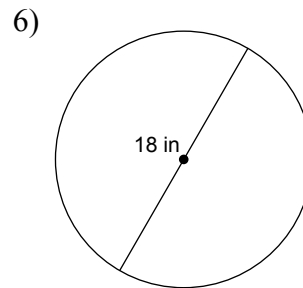
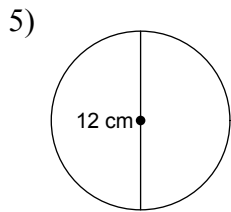
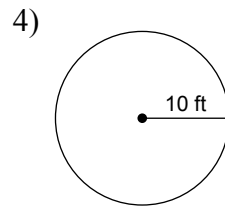
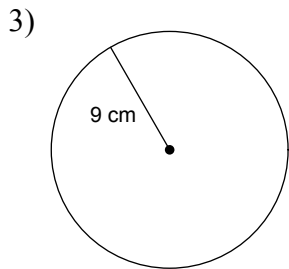
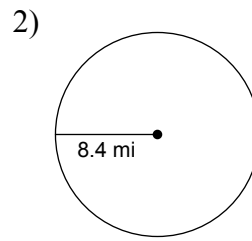
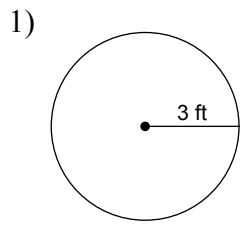
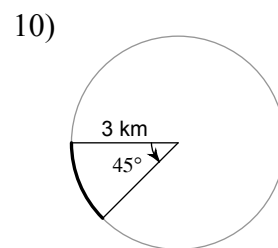
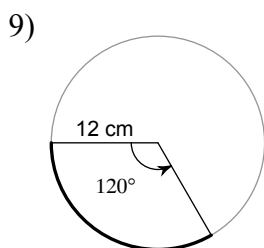


Chapter 10: Circles

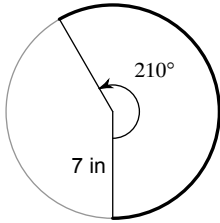
Find the circumference of each circle. Use your calculator's value of π . Round your answer to the nearest tenth.



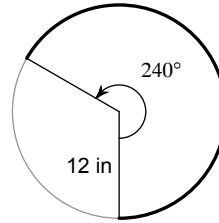
Find the length of each arc.



11)



12)



Find the radius of each circle. Use your calculator's value of π . Round your answer to the nearest tenth.

13) circumference = 31.4 in

14) circumference = 56.5 m

15) circumference = 62.8 km

16) circumference = 69.1 ft

17) area = 113.1 m²

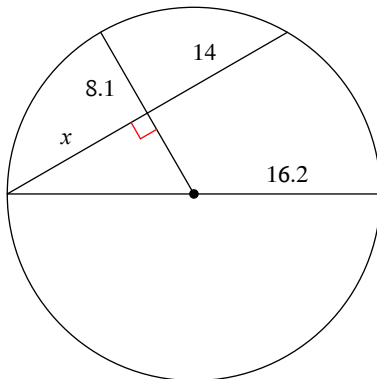
18) area = 295.6 m²

19) area = 339.8 in²

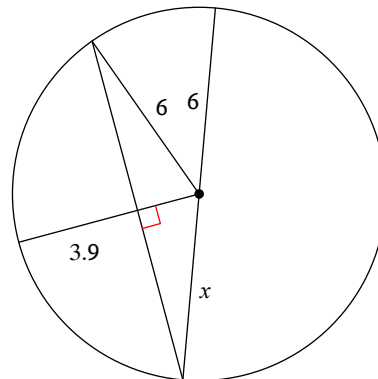
20) area = 452.4 in²

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

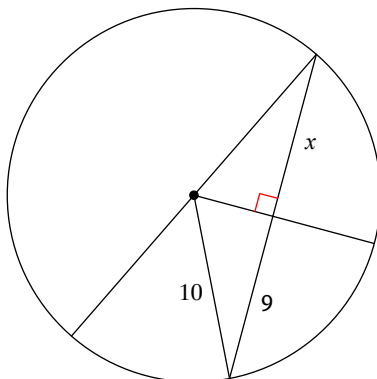
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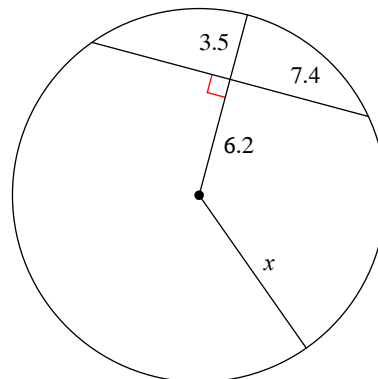
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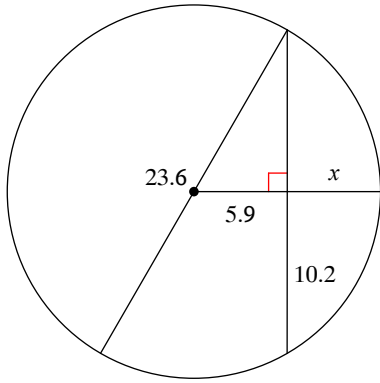
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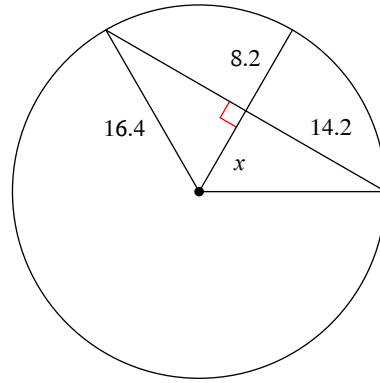
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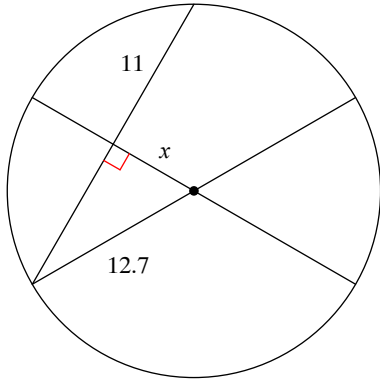
25)



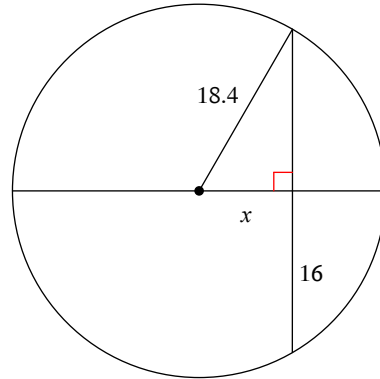
26)



27)

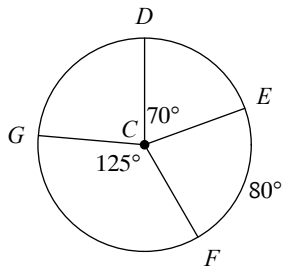


28)

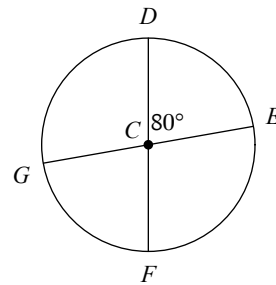


Find the measure of the arc or central angle indicated. Assume that lines which appear to be diameters are actual diameters.

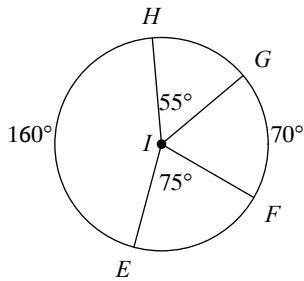
29) $m\angle GCD$



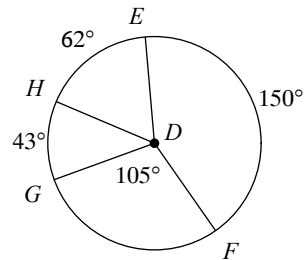
30) $m\angle ECF$



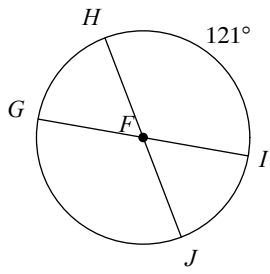
31) $m\angle GIE$



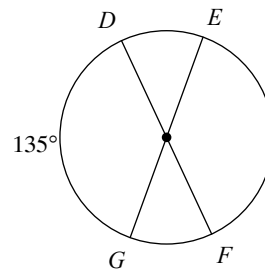
32) $m\angle FDH$



33) $m\angle JFG$

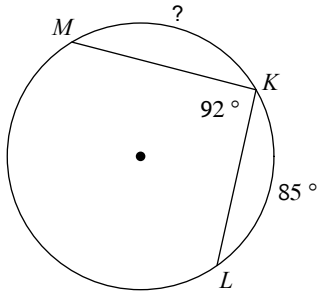


34) $m\widehat{EF}$

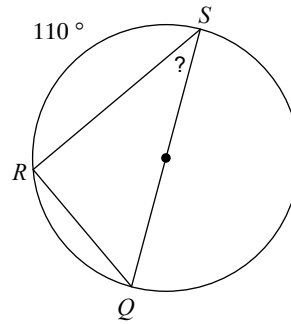


Find the measure of the arc or angle indicated.

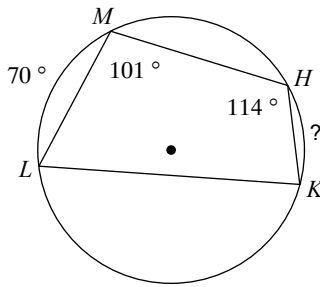
35)



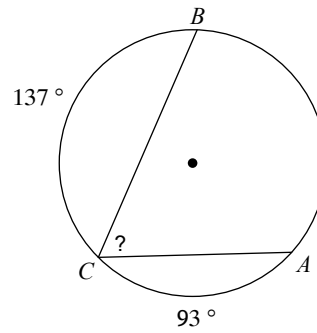
36)



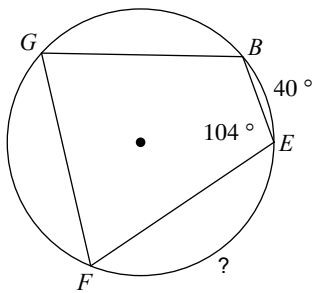
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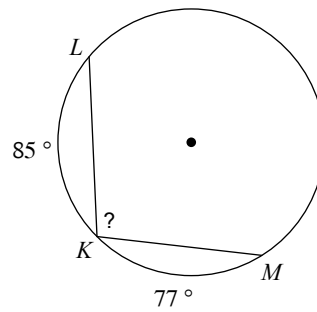
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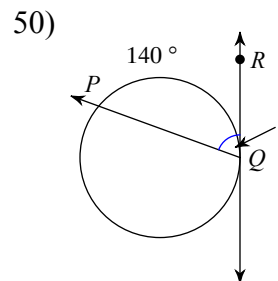
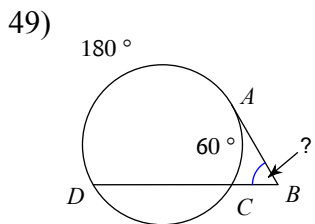
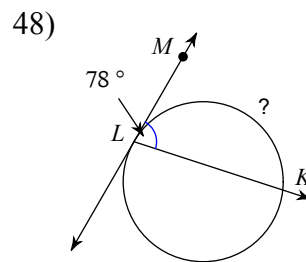
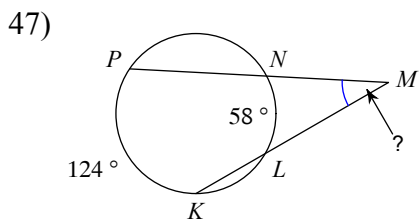
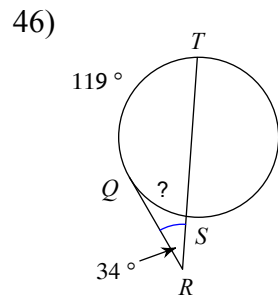
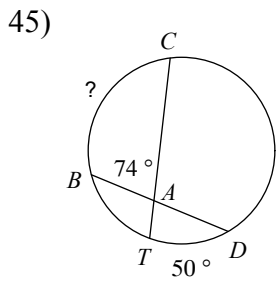
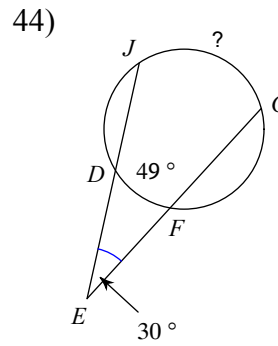
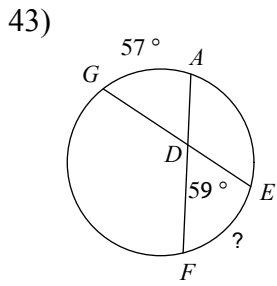
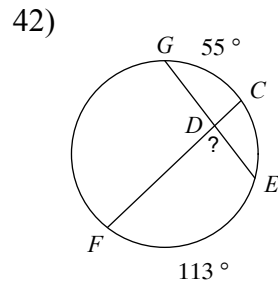
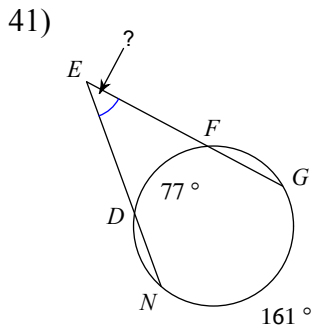
39)



40)

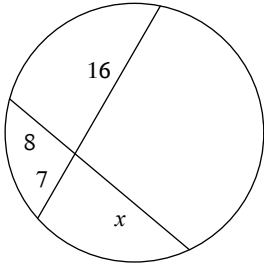


Find the measure of the arc or angle indicated. Assume that lines which appear tangent are tangent.

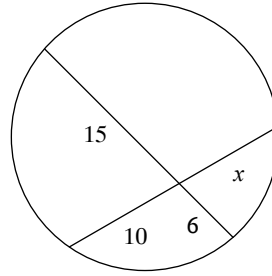


Solve for x . Assume that lines which appear tangent are tangent.

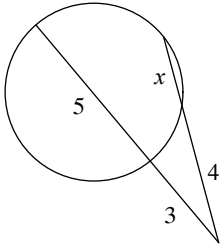
51)



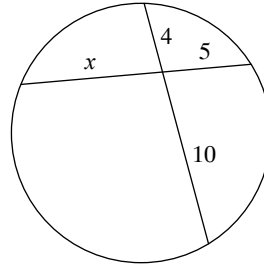
52)



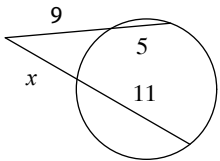
53)



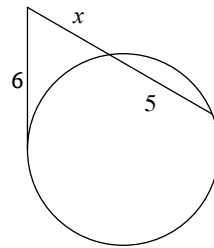
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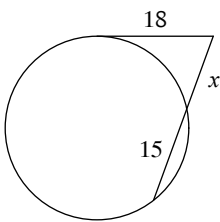
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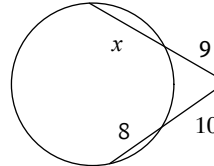
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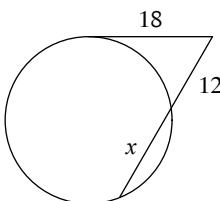
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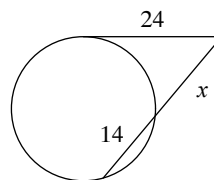
58)



59)

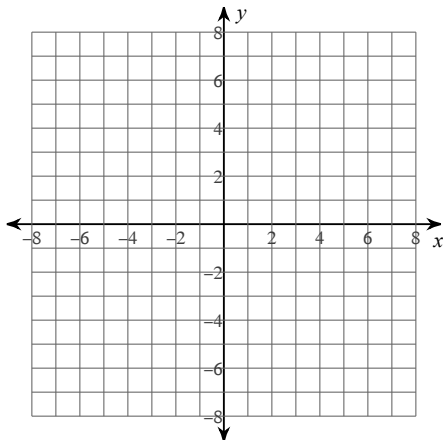


60)

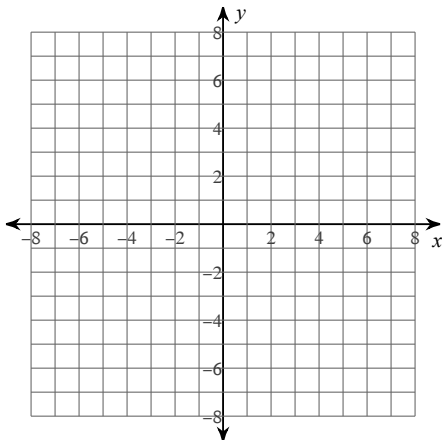


Identify the center and radius of each. Then sketch the graph.

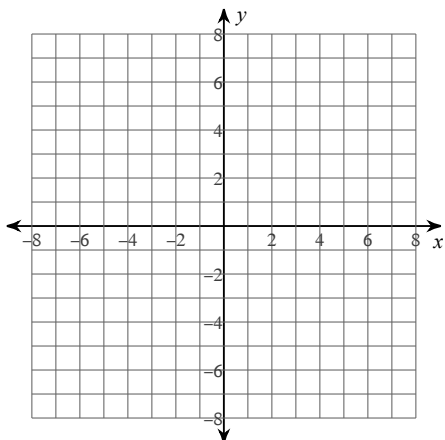
61) $(x + 1)^2 + (y + 1)^2 = 36$



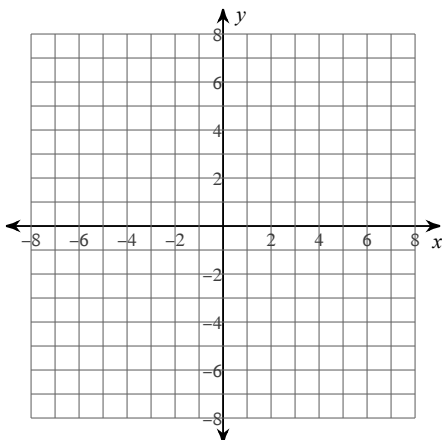
62) $(x + 3)^2 + (y - 4)^2 = 6$



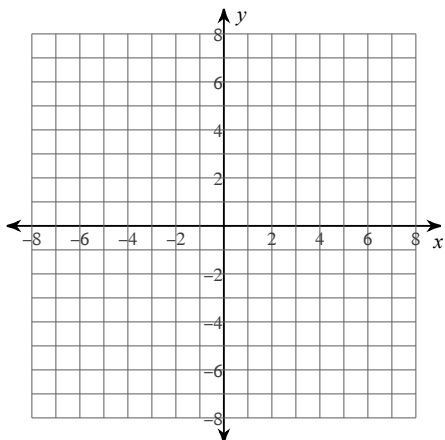
63) $x^2 + (y + 1)^2 = 36$



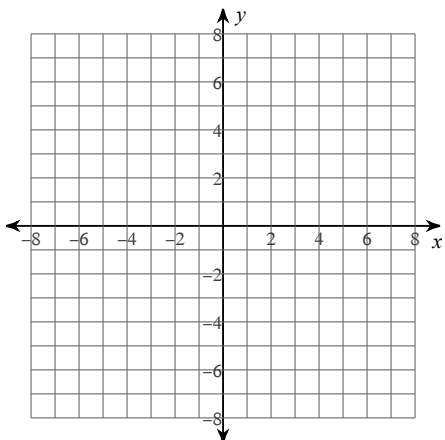
64) $(x - 2)^2 + (y - 4)^2 = 3$



65) $(x + 2)^2 + (y + 2)^2 = 9$



66) $(x - 3)^2 + (y + 4)^2 = 6$



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

67) Center: $(-3, 13)$
Radius: 5

68) Center: $(-1, 1)$
Radius: 11

69) Center: $(-9, 14)$
Radius: 3

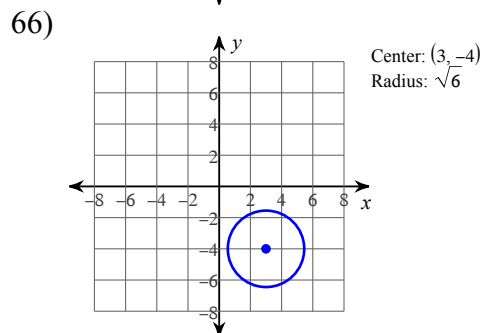
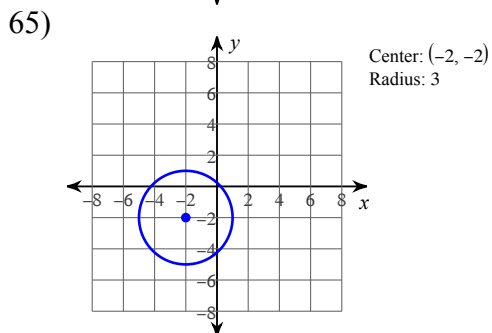
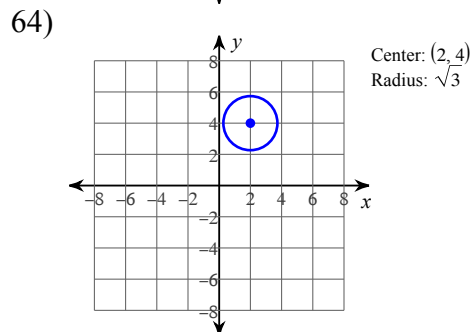
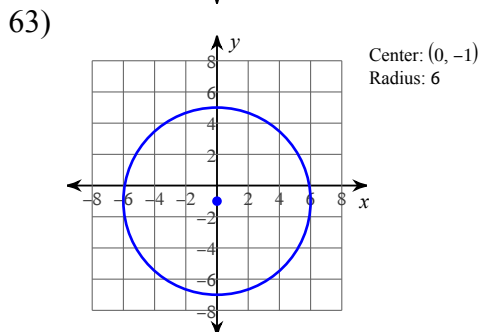
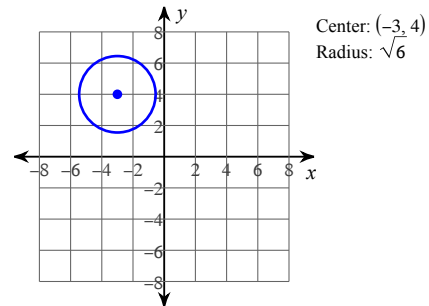
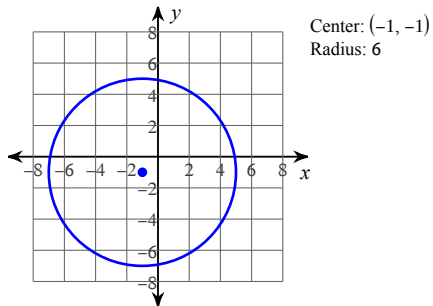
70) Center: $(-16, -6)$
Radius: 3

71) Center: $(-13, -11)$
Radius: 5

72) Center: $(-12, 14)$
Radius: 4

Answers to Chapter 10: Circles (ID: 1)

- | | | | |
|-----------------|-------------------------|--------------------------|-----------------|
| 1) 18.8 ft | 2) 52.8 mi | 3) 56.5 cm | 4) 62.8 ft |
| 5) 37.7 cm | 6) 56.5 in | 7) 31.4 m | 8) 12.6 m |
| 9) 8π cm | 10) $\frac{3\pi}{4}$ km | 11) $\frac{49\pi}{6}$ in | 12) 16π in |
| 13) 5 in | 14) 9 m | 15) 10 km | 16) 11 ft |
| 17) 6 m | 18) 9.7 m | 19) 10.4 in | 20) 12 in |
| 21) 14 | 22) 6 | 23) 9 | 24) 9.7 |
| 25) 5.9 | 26) 8.2 | 27) 6.3 | 28) 9.1 |
| 29) 85° | 30) 100° | 31) 145° | 32) 148° |
| 33) 121° | 34) 135° | 35) 91° | 36) 35° |
| 37) 44° | 38) 65° | 39) 112° | 40) 99° |
| 41) 42° | 42) 84° | 43) 61° | 44) 109° |
| 45) 98° | 46) 51° | 47) 33° | 48) 156° |
| 49) 60° | 50) 70° | 51) 14 | 52) 9 |
| 53) 2 | 54) 8 | 55) 7 | 56) 4 |
| 57) 12 | 58) 11 | 59) 15 | 60) 18 |
| 61) | | 62) | |



67) $(x + 3)^2 + (y - 13)^2 = 25$

68) $(x + 1)^2 + (y - 1)^2 = 121$

69) $(x + 9)^2 + (y - 14)^2 = 9$

70) $(x + 16)^2 + (y + 6)^2 = 9$

71) $(x + 13)^2 + (y + 11)^2 = 25$

72) $(x + 12)^2 + (y - 14)^2 = 16$