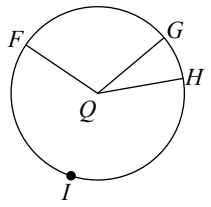
Chapter 11: Circles

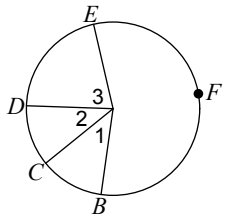
Date_____ Period____

If an angle is given, name the arc it makes. If an arc is given, name its central angle.

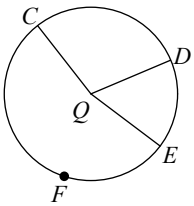
1) $\overset{\frown}{FG}$



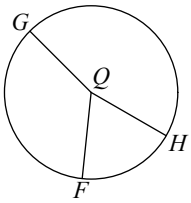
2) Major arc for $\angle I$



3) $\overset{\frown}{CED}$

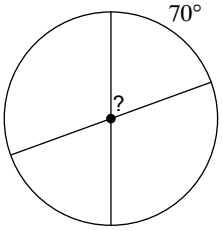


4) $\overset{\frown}{FH}$



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

5)



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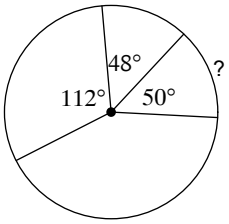

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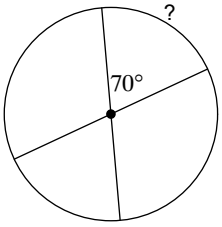
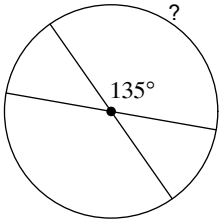
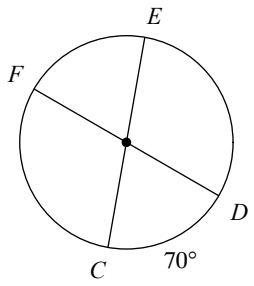


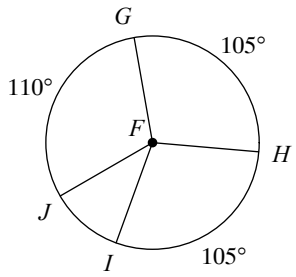
8)



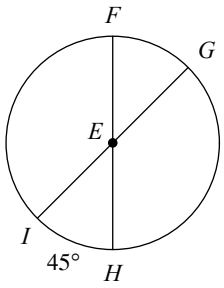
9) $m\overset{\frown}{DCE}$



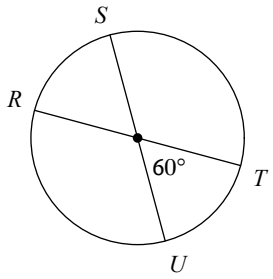
10) $m\angle IFG$



11) $m\angle IEF$

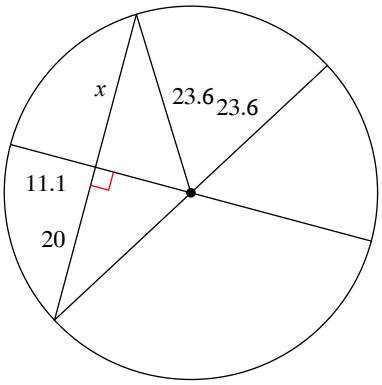


12) $m\overset{\frown}{URT}$



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

13)



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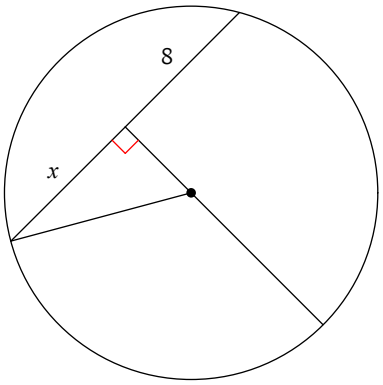

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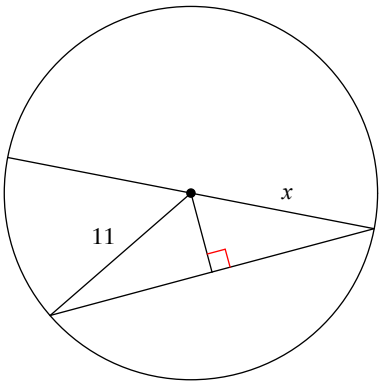

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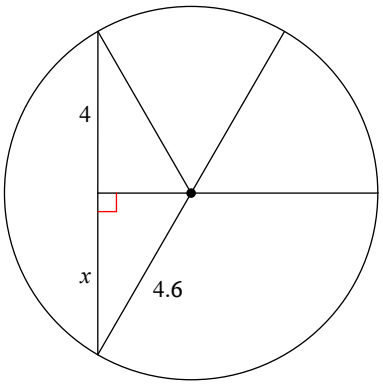

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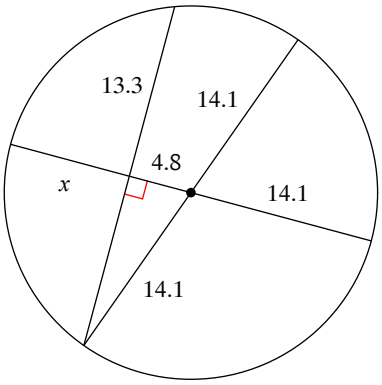

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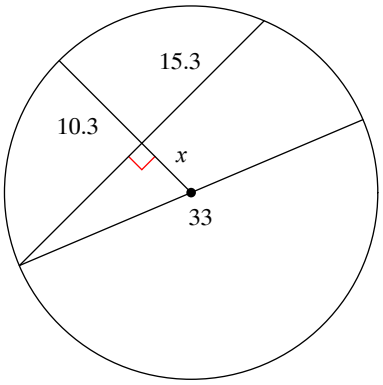

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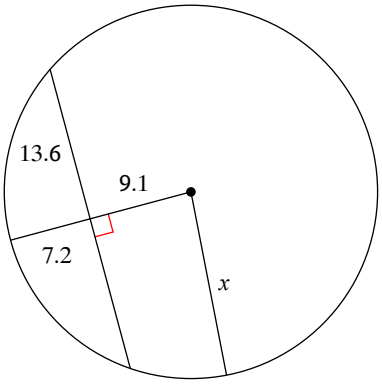

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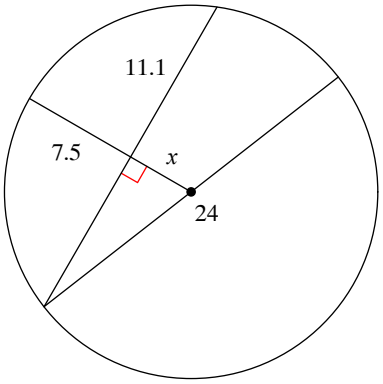

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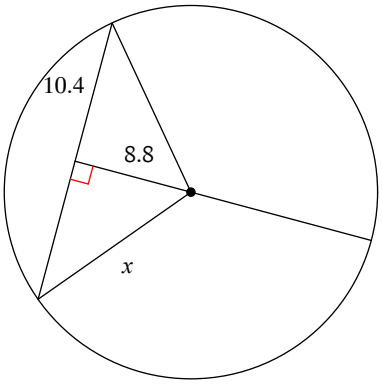

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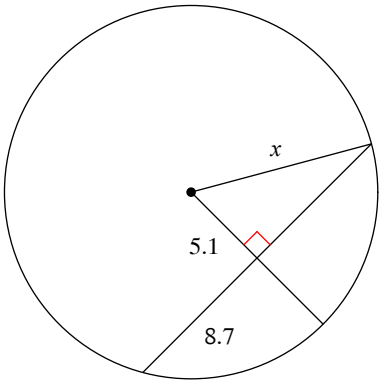

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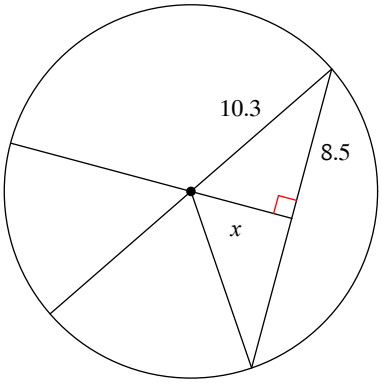

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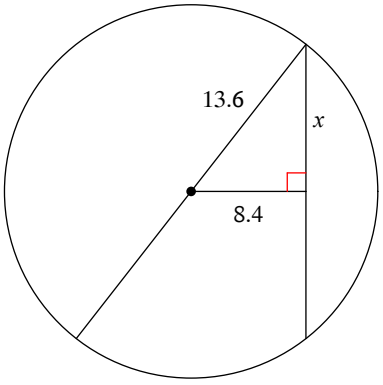
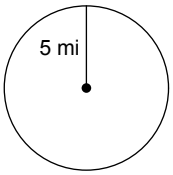


Find the circumference of each circle. Use your calculator's value of π. Round your answer to the nearest tenth.

25)



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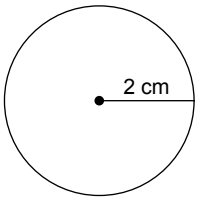

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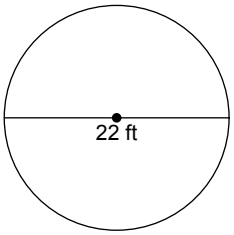

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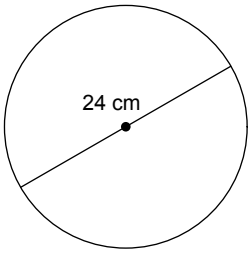
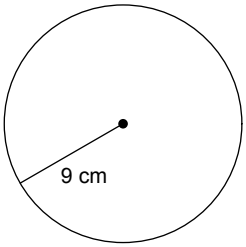
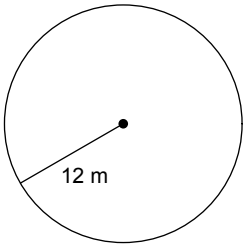


Find the area of each. Use your calculator's value of π. Round your answer to the nearest tenth.

29)

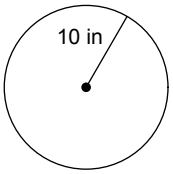


30)

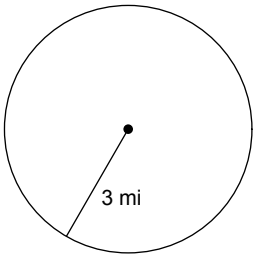


Find the circumference of each circle. Use your calculator's value of π. Round your answer to the nearest tenth.

31)

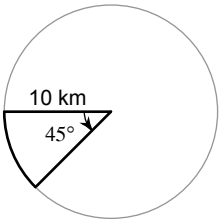


32)



Find the area of each sector.

33)



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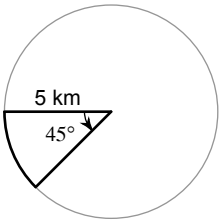

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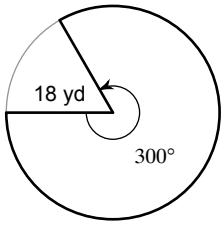

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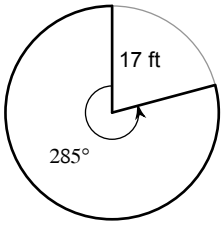

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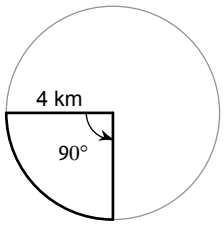
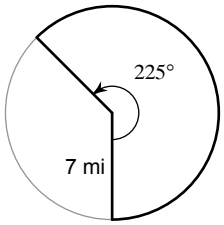


38)



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

39) circumference = 37.7 km

40) circumference = 31.4 mi

41) circumference = 16.3 yd

42) circumference = 28.9 yd

43) area = 314.2 ft²

44) area = 415.5 mi²

45) area = 28.3 ft²

46) area = 21.2 km²

Answers to Chapter 11: Circles (ID: 1)

1) $\angle FQG$
2) $\overset{\frown}{BEC}$
3) $\angle CQD$
4) $\angle FQH$
5) 70°
6) 50°
7) 70°
8) 135°
9) 250°
10) 150°
11) 135°
12) 300°
13) 20
14) 8
15) 11
16) 4
17) 9.3
18) 6.2
19) 16.3
20) 4.5
21) 13.6
22) 10.1
23) 5.8
24) 10.7
25) 31.4 mi
26) 12.6 cm
27) 69.1 ft
28) 75.4 cm
29) 254.5 cm²
30) 452.4 m²
31) 62.8 in
32) 18.8 mi
33) $\frac{25\pi}{2}$ km²
34) $\frac{25\pi}{8}$ km²
35) 270π yd²
36) $\frac{5491\pi}{24}$ ft²
37) 4π km²
38) $\frac{245\pi}{8}$ mi²
39) 6 km
40) 5 mi
41) 2.6 yd
42) 4.6 yd
43) 10 ft
44) 11.5 mi
45) 3 ft
46) 2.6 km