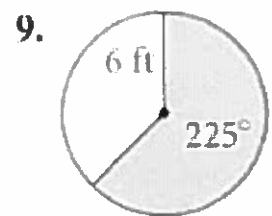
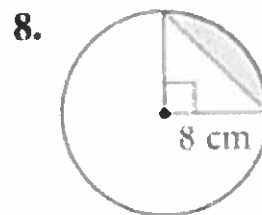
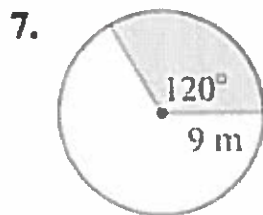
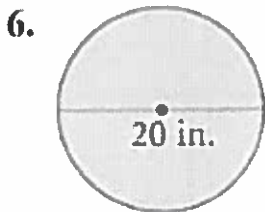


Page 580 #6-10

Find the area of each shaded region. Leave answers in terms of π .



10. In a circle of radius 18 mm, $m\widehat{AB} = 45$. Find the length of \widehat{AB} in terms of π .

$$\frac{45}{360} \cdot 2\pi(18) = 4.5\pi \text{ mm}$$

6. $100\pi \text{ in}^2$

7. $\frac{120}{360} \cdot 81\pi$
 $27\pi \text{ m}^2$

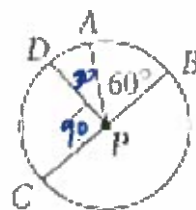
8. $\frac{90}{360} \cdot 64\pi$
 $A_{\text{sector}} = \frac{16}{9}\pi$
 $A_{\Delta} = \frac{1}{2}(8)(8) = 32$
 $A_{\text{seg}} = (16\pi - 32) \text{ cm}^2$

9. $\frac{225}{360} \cdot 36\pi$
 $22.5\pi \text{ ft}^2$

Page 591 #26-33

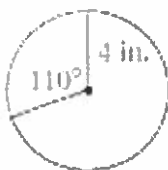
Find each measure.

26. $m\angle APD$ 30° 27. $m\widehat{AC}$ 120°
 28. $m\widehat{ABD}$ 330° 29. $m\angle CPA$ 120°



Find the length of each arc shown in red. Leave your answer in terms of π .

30.

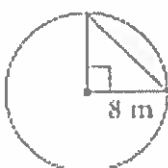


31.



Find the area of each shaded region. Round your answer to the nearest tenth.

32.

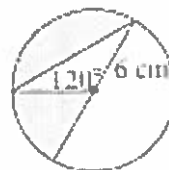


$$A_{\text{sector}} - A_{\Delta} = A_{\text{segment}}$$

$$\frac{90}{360} \cdot \pi(8)^2 - \frac{1}{2}(8)(8)$$

$$16\pi - 32 = 18.3 \text{ m}^2$$

33.



$$A_{\text{sector}} - A_{\Delta} = \text{Total shaded}$$

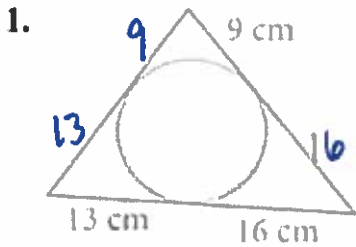
$$\frac{1}{2}(6)^2\pi - \frac{1}{2}(6)(6)\sin 120$$

$$18\pi - 15.588$$

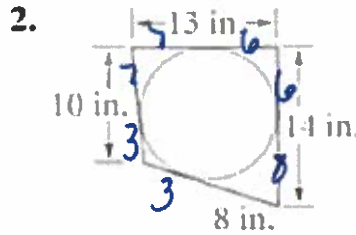
$$\boxed{41 \text{ cm}^2}$$

Page 685 #1-3, 7-10

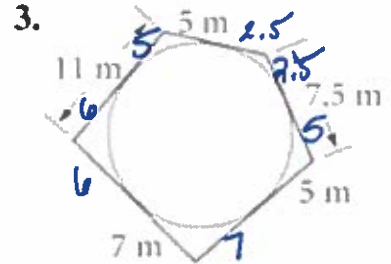
Each polygon below circumscribes the circle. Find the perimeter of the polygon.



76 cm

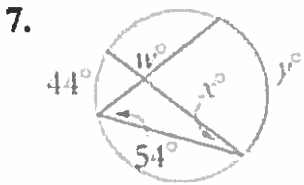


51 in

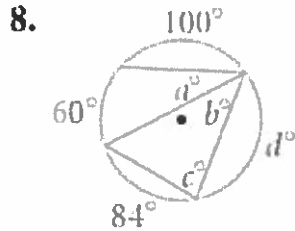


51 m

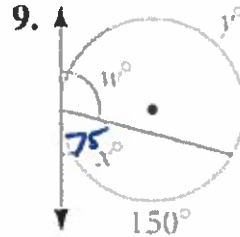
Algebra Find the value of each variable. Lines that appear to be tangent are tangent.



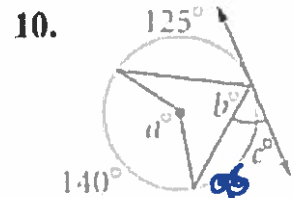
w: 104
x: 22°
y: 108



a: 30
b: 42
c: 80
d: 116



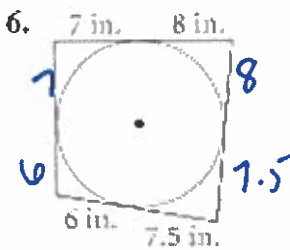
w: 105
x: 75
y: 210



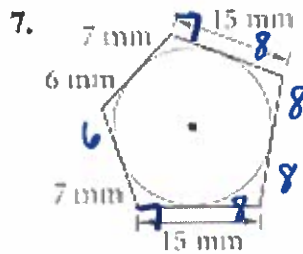
a: 140
b: 70
c: 47.5

Page 707 #6-8,13-15

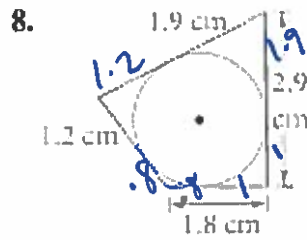
Each polygon circumscribes a circle. Find the perimeter of the polygon.



57 in.

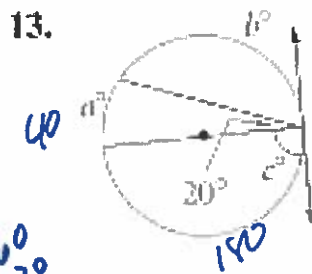


72 mm



9.8 cm

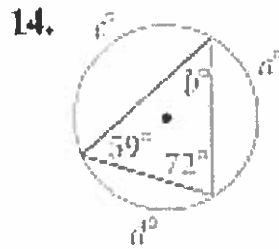
Assume that lines that appear tangent are tangent. Find the value of each variable.



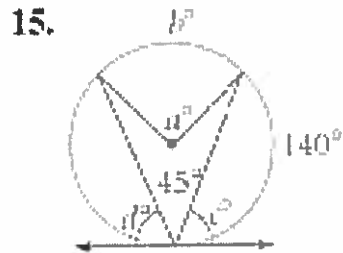
360
-220

140

a: 40
b: 140
c: 90



a: 118°
b: 49°
c: 144°
d: 98°



65 45 70

a: 90°
b: 90°
c: 70°
d: 65°