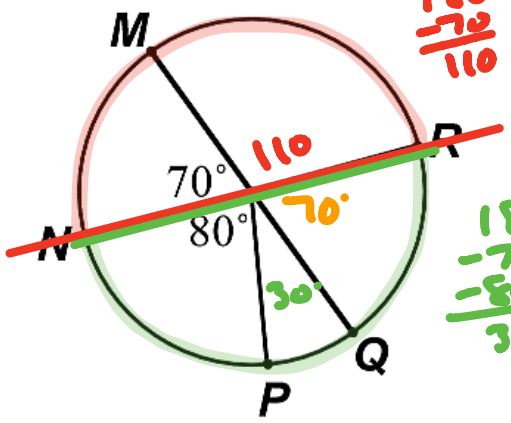
Geometry Unit 4 Quiz Review 180 Name: Key Block: ___

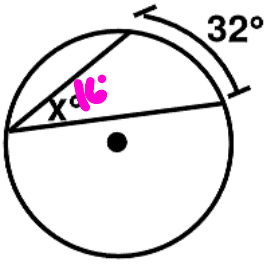


180 −70 110

180 −70 −80 30

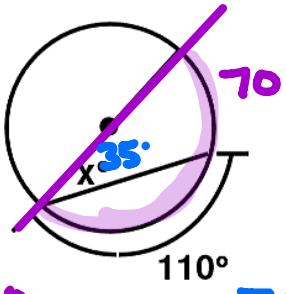
1. $m\widehat{MR}$ 110°
2. $m\widehat{RQ}$ 70°
3. $m\widehat{PQ}$ 30
4. $m\widehat{NR}$ 180°
5. $m\widehat{NRM}$ 290°

6. Find x.



32/2

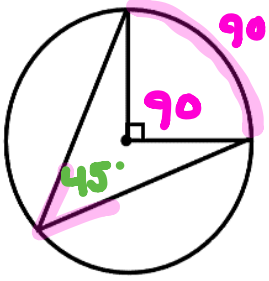
7. Find x.



180 −110 70

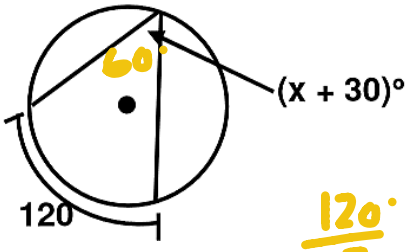
70/2

8. Find the inscribed angle.



90/2

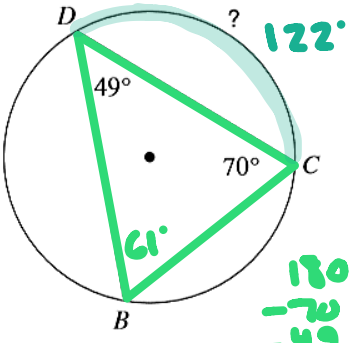
9. Solve for x.



120/2

x + 30 = 60
−30 −30
x = 30

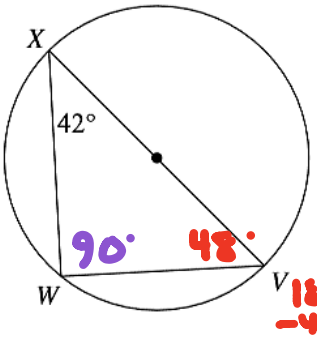
10. Find $m\widehat{DC}$. 2(61)



122°

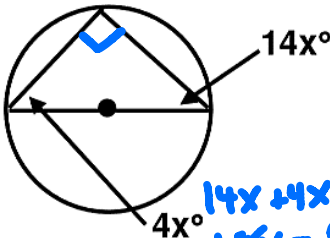
180 −70 −49 61

11. Find $m\angle W$ and $m\angle V$.



180 −42 −90 48°

12. Solve for x.

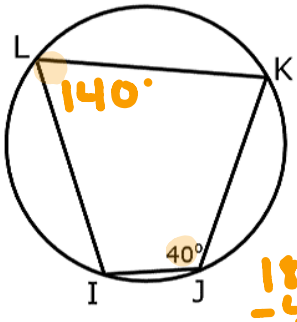


14x + 4x = 90

18x/18 = 90/18

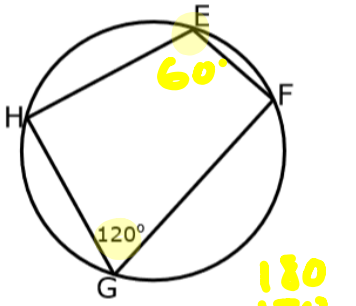
x = 5

13. Find $m\angle L$



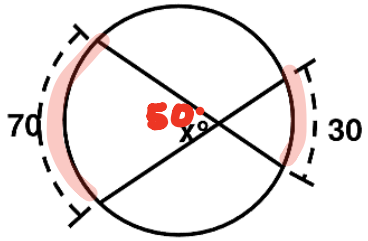
180 −40 140

14. Find $m\angle E$



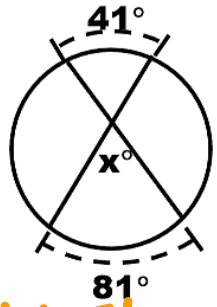
180 −120 60°

15. Solve for x.



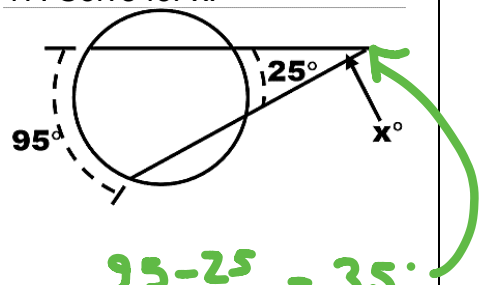
$\frac{70+30}{2} = 50°$

16. Solve for x.



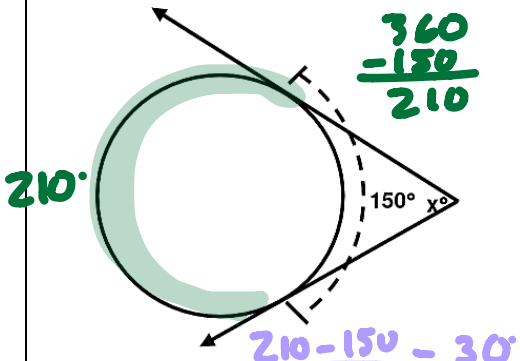
$\frac{41+81}{2} = 61°$

17. Solve for x.



$\frac{95-25}{2} = 35°$

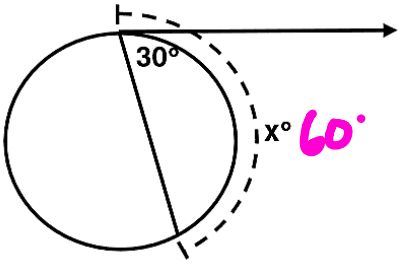
18. Solve for x.



360 − 150 = 210

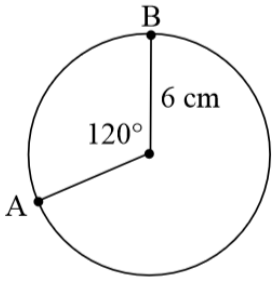
$\frac{210-150}{2} = 30°$

19. Find x.



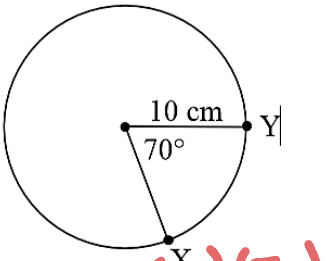
60°

20. Find the arc length of $\overset{\frown}{AB}$



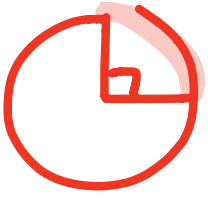
$AL = \frac{2\pi(6)(120)}{360} = 4\pi$

21. Find the arc length of $\overset{\frown}{XY}$.



$AL = \frac{2\pi(10)(70)}{360} = \frac{35\pi}{9}$

22. A circle has a circumference whose length is 25 π. Find the length of an arc whose central angle is 90°.



$\frac{25\pi}{4}$

23. Find the measure of the central angle of an arc if its length is 14 π and the radius is 18.

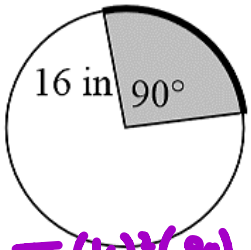
$AL = \frac{2\pi r\theta}{360}$

$360(14\pi) = \left(\frac{2\pi(18)\theta}{360}\right)360$

$\frac{5040\pi}{36\pi} = \frac{2\pi(18)\theta}{36\pi}$

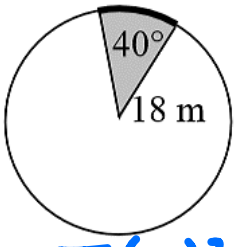
$140 = \theta$

24. Find the area of the sector.



$AS = \frac{\pi(16)^2(90)}{360} = 64\pi$

25. Find the area of the sector.



$AS = \frac{\pi(18)^2(40)}{360} = 36\pi$

26. If the radius of each slice of pizza is 9 inches, what is the area of one slice of pizza?

$A = \pi r^2$

$= \pi(9)^2$

$= \frac{81\pi}{8}$