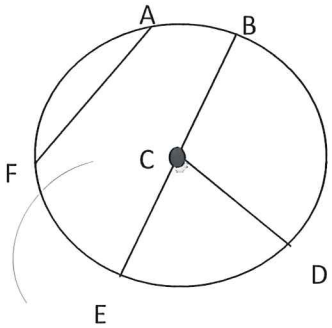
Accelerated Geometry HW

Name: Key

10.1 and 10.2 HW

10.1:

1.)

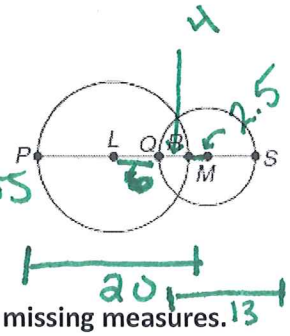


Name a chord: $\overline{FA}$ or $\overline{EB}$

Name a diameter: $\overline{EB}$

Name a radius: $\overline{CD}$, $\overline{EC}$, $\overline{BC}$

The diameters of $\odot L$ and $\odot M$ are 20 and 13 units, respectively. Find each measure if $QR = 4$.



2. LQ = 6units

3. RM = 2.5units

The radius, diameter or circumference of a circle is given. Find the exact missing measures.

4. r=15m

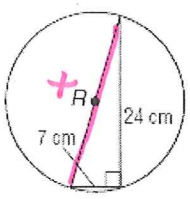
d = 30m, C = 30πm

5. C=18πm

d = 18m, r = 9m

Find the exact circumference of each circle.

6.



$x^2 = 24^2 + 7^2$

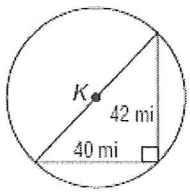
$x^2 = 625$

$x = 25$

$d = 25$

$\boxed{C = 25\pi cm}$

7.



Herman purchased a sundial to use as the centerpiece for a garden. The diameter of the sundial is 9.5 inches.

8. Find the radius of the sundial. r = 4.75in

9. Find the circumference of the sundial to the nearest hundredth.

plug in π ← use π key Not 3.14

$C = 2\pi r$

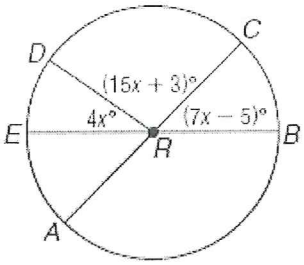
$C = 2\pi(4.75)$

$C = 9.5\pi$ in

$\boxed{C \approx 29.85in}$

10.2:

ALGEBRA In $\odot R$, $\overline{AC}$ and $\overline{EB}$ are diameters. Find each measure.



1. $m\angle ERD$ 28°

2. $m\angle CRD$ 108°

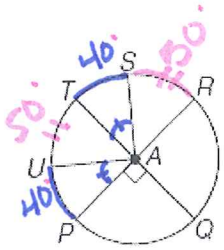
3. $m\angle BRC$ 44°

4. $m\angle ARB$ 136°

5. $m\angle ARE$ 44°

6. $m\angle BRD$ 152°

In $\odot A$, $m\angle PAU = 40$, $\angle PAU \cong \angle SAT$, and $\angle RAS \cong \angle TAU$. Find each measure.



7. $m\widehat{PQ}$ 90°

8. $m\widehat{PQR}$ 180°

9. $m\widehat{ST}$ 40°

10. $m\widehat{RS}$ 50°

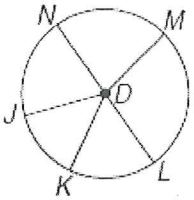
11. $m\widehat{RSU}$ 140°

12. $m\widehat{STP}$ 130°

13. $m\widehat{PQS}$ 230°

14. $m\widehat{PRU}$ 320°

The diameter of $\odot D$ is 18 units long. Find the length of each arc for the given angle measure.



15. $\widehat{LM}$ if $m\angle LDM = 100$

5π units

16. $\widehat{MN}$ if $m\angle MDN = 80$

4π units

17. $\widehat{KL}$ if $m\angle KDL = 60$

3π units

18. $\widehat{NJK}$ if $m\angle NDK = 120$

6π units

19. $\widehat{KLM}$ if $m\angle KDM = 160$

8π units

20. $\widehat{JK}$ if $m\angle JDK = 50$

2.5π units