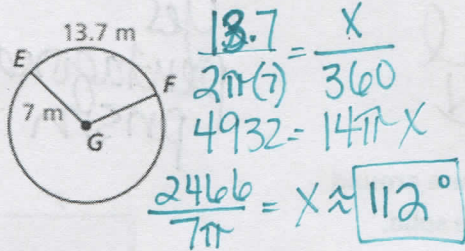


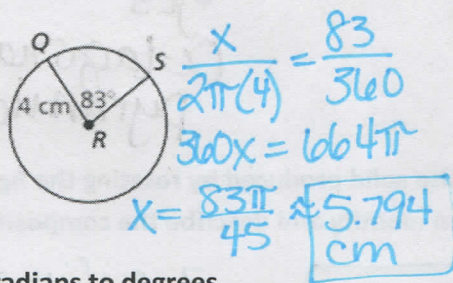
Quiz Review 11.1 – 11.4

1 – 3: Find the indicated measure.

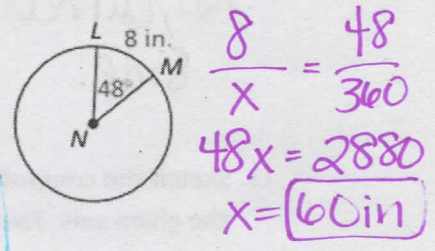
1. $m\widehat{EF}$



2. arc length of \widehat{QS}



3. circumference of $\odot N$



4. Convert 26° to radians. Then convert $\frac{5\pi}{9}$ radians to degrees.

$\frac{26}{1} \cdot \frac{\pi}{180} = \frac{13\pi}{90}$

$\frac{5\pi}{9} \cdot \frac{180}{\pi} = 100^\circ$

5 – 6: Use the figure provided to find the indicated measure.

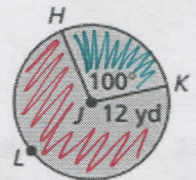
5. Area of the blue sector

$\frac{x}{360} = \frac{100}{360}$
 $360x = 14400\pi$

$x = 40\pi$ yd²
 ≈ 125.664 yd²

6. Area of the red sector

$\frac{x}{360} = \frac{260}{360}$
 $360x = 37440\pi$
 $x = 104\pi$ yd² ≈ 326.726 yd²



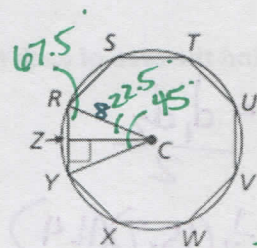
7 – 9: In the diagram, RSTUVWXY is a regular octagon inscribed in circle C.

7. Identify the following using correct notation:

- a) center C
- b) radius \overline{CR} \overline{CY}
- c) apothem \overline{CZ}
- d) central angle $\angle RCY$ or $\angle ZCR$...

8. Find the following measures:

- a) $m\angle RCY = 45^\circ$
- b) $m\angle RCZ = 22.5^\circ$
- c) $m\angle ZRC = 67.5^\circ$



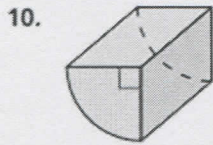
$\frac{360}{8} = 45$

9. The radius of the circle is 8 units. Find the area of the octagon.

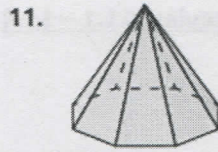
$a = \overline{CZ} = 8 \sin 67.5 \approx 7.391$
 $\overline{RY} = s = 2(8 \cos 67.5) \approx 6.123$
 $P = 8(6.123) \approx 48.983$

$A = \frac{1}{2} aP$
 $= \frac{1}{2} (7.391)(48.983)$
 $\approx 181.017 u^2$

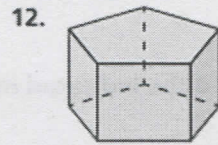
10 – 12: Tell whether the solid is a polyhedron. If not, state why not. If it is, name the polyhedron.



No, curved side.

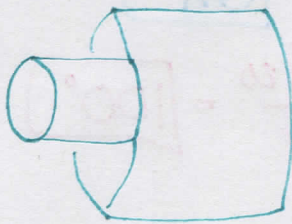


Yes
Octagonal pyramid



Yes
pentagonal prism

13. Sketch the composite solid produced by rotating the figure around the given axis. Then identify and describe the composite solid.

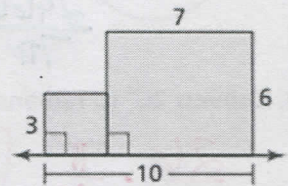


2 cylinders connected on their side

Smaller \square
 $r = 3u$ $h = 3u$

bigger \square
 $r = 6u$ $h = 7u$

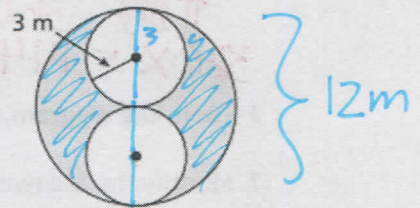
Total Ht.
10u



14. The two white congruent circles just fit into the blue circle. What is the area of the blue region?



$$\begin{aligned}
 A &= \pi R^2 - 2(\pi r^2) \\
 &= \pi(6)^2 - 2(\pi(3)^2) \\
 &= 36\pi - 18\pi \\
 &= 18\pi \text{ m}^2 \\
 &\approx 56.549 \text{ m}^2
 \end{aligned}$$

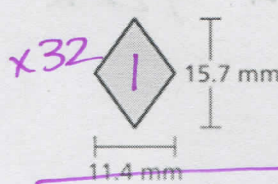


15. Find the area of each rhombus tile. Then find the area of the pattern.

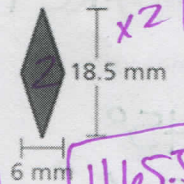
$$A = \frac{d_1 d_2}{2}$$

$$\begin{aligned}
 A_1 &= \frac{1}{2}(15.7)(11.4) \\
 &= 89.49 \text{ mm}^2
 \end{aligned}$$

$$\begin{aligned}
 A_2 &= \frac{1}{2}(18.5)(6) \\
 &= 55.5 \text{ mm}^2
 \end{aligned}$$



$$2863.68 \text{ mm}^2$$



$$1165.5 \text{ mm}^2$$

