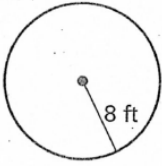
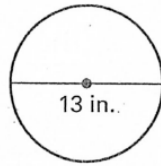


Use the diagram to find the indicated measure. Round answers to the nearest tenth, when necessary.

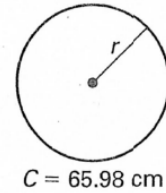
1. Find the circumference



2. Find the circumference



3. Find the radius



Find the indicated measure.

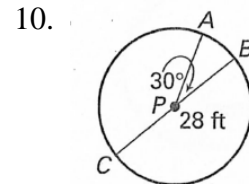
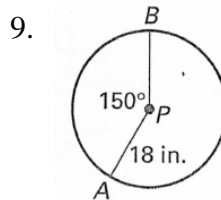
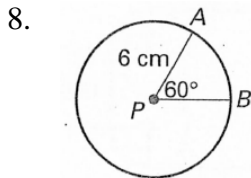
4. The **exact** radius of a circle with circumference 42 meters.

5. The **exact** diameter of a circle with circumference 39 cm.

6. The **exact** circumference of a circle with a 15 in diameter

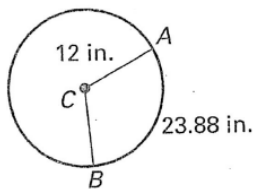
7. The **exact** circumference of a circle with a 27 ft radius.

Find the length of \widehat{AB} . Round answers to the nearest tenth, when necessary.

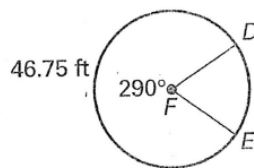


Find the indicated measure. Round answers to the nearest tenth, when necessary.

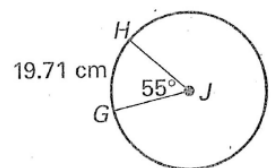
11. $m\widehat{AB}$



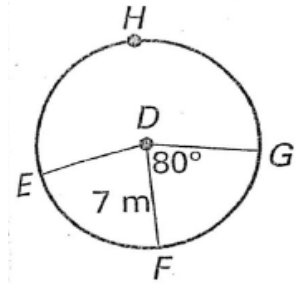
12. Circumference of $\odot F$



13. Radius of $\odot J$



In $\odot D$ shown below, $\angle EDF \cong \angle FDG$. Find the indicated measure. Round answers to the nearest tenth, when necessary.



14. $m\widehat{EFG}$

15. $m\widehat{EHG}$

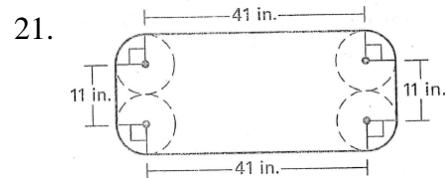
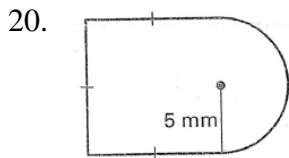
16. Length of \widehat{EFG}

17. Length of \widehat{EHG}

18. $m\widehat{EHF}$

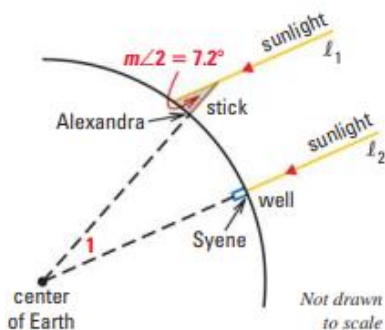
19. Length of \widehat{FEG}

Find the perimeter of the region. Round answers to the nearest tenth, when necessary.



22. A square with side length 6 cm is inscribed in a circle so that all four vertices are on the circle. Draw a sketch to represent this problem. Find the circumference of the circle.

23. Over 2000 years ago, the Greek scholar Eratosthenes estimated Earth's circumference by assuming that the Sun's rays are parallel. He chose a day when the Sun shone straight down into a well in the city of Syene. At noon, he measured the angle the Sun's rays made with a vertical stick in the city of Alexandria. Eratosthenes assumed that the distance from Syene and Alexandria was about 575 miles. Round answers to the nearest tenth, when necessary.



a.) Find $m\angle 1$.

b.) Estimate Earth's circumference