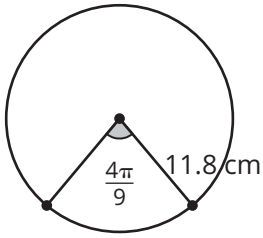
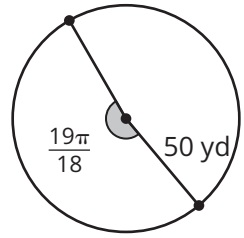
Name _____ Date _____

11. The radius of a circle is 11.8 centimeters. What is the length of an arc intercepted by an angle of $\frac{4\pi}{9}$ radians?



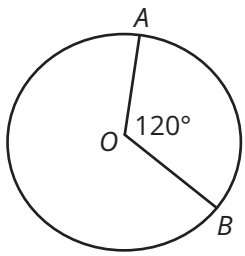
12. The radius of a circle is 50 yards. What is the length of an arc intercepted by an angle of $\frac{19\pi}{18}$ radians?



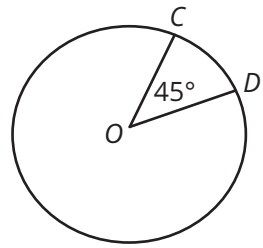
III. Sectors and Segments

A. Calculate the area of each sector. Write your answer in terms of π.

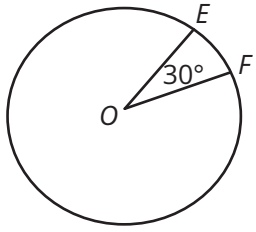
1. If the radius of the circle is 9 centimeters, what is the area of sector *AOB*?



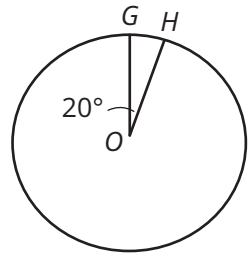
2. If the radius of the circle is 16 meters, what is the area of sector *COD*?



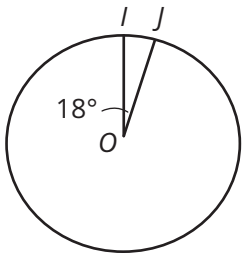
3. If the radius of the circle is 15 feet, what is the area of sector *EOF*?



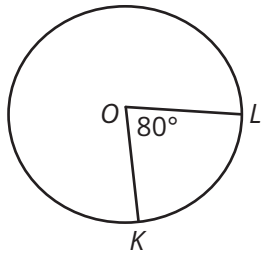
4. If the radius of the circle is 10 inches, what is the area of sector *GOH*?



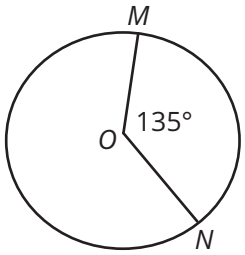
5. If the radius of the circle is 32 centimeters, what is the area of sector *IOJ*?



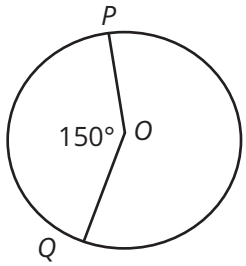
6. If the radius of the circle is 20 millimeters, what is the area of sector *KOL*?



7. If the radius of the circle is 24 centimeters, what is the area of sector *MON*?

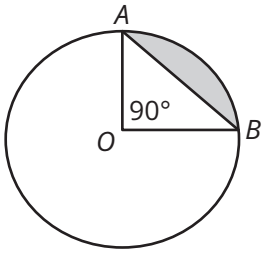


8. If the radius of the circle is 21 meters, what is the area of sector *POQ*?

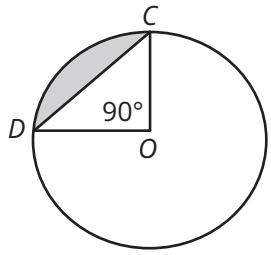


B. Calculate the area of each segment. Round your answer to the nearest tenth, if necessary. Use 3.14 to estimate π.

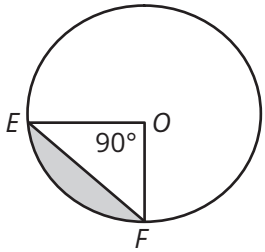
1. If the radius of the circle is 6 centimeters, what is the area of the shaded segment?



2. If the radius of the circle is 14 inches, what is the area of the shaded segment?



3. If the radius of the circle is 17 feet, what is the area of the shaded segment?



4. If the radius of the circle is 22 centimeters, what is the area of the shaded segment?