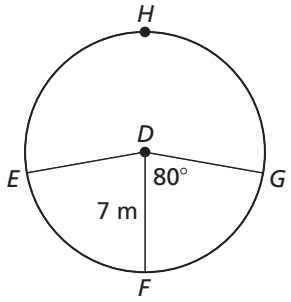
Name_____ Date _____

11.1 Practice B

In Exercises 1 and 2, find the indicated measure.

1. exact diameter of a circle with a circumference of 36 meters
2. exact circumference of a circle with a radius of 5.4 feet
3. Find the circumference of a circle inscribed in a square with a side length of 14 centimeters.

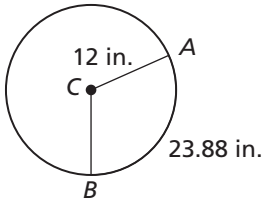
In Exercises 4–9, use the diagram of circle *D* with $\angle EDF \cong \angle FDG$ to find the indicated measure.



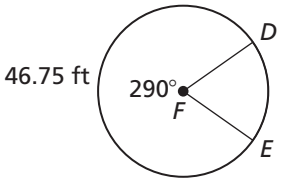
4. $m\widehat{EFG}$
5. $m\widehat{EHG}$
6. arc length of $\widehat{EFG}$
7. arc length of $\widehat{EHG}$
8. $m\widehat{EHF}$
9. arc length of $\widehat{FEG}$

In Exercises 10–12, find the indicated measure.

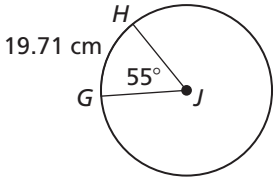
10. $m\widehat{AB}$



11. circumference of $\odot F$



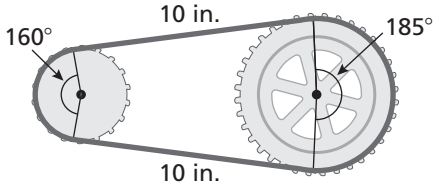
12. radius of $\odot J$



In Exercises 13 and 14, convert the angle measure.

13. Convert $105°$ to radians.
14. Convert $\frac{5\pi}{6}$ radians to degrees.

15. The chain of a bicycle travels along the front and rear sprockets, as shown in the figure. The circumferences of the rear sprocket and the front sprocket are 12 inches and 20 inches, respectively.



   a. How long is the chain? Round your answer to the nearest tenth.

   b. On a chain, the teeth are spaced in $\frac{1}{2}$-inch intervals. About how many teeth are there on this chain?