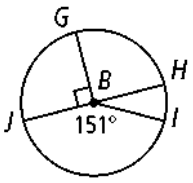
Name_____ Class_____ Date_____

10-6 Practice

Form G

Circles and Arcs

Find the measure of each arc in $\odot B$.



4. $\overset{\frown}{GJ}$

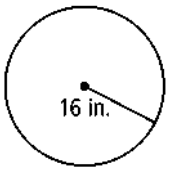
7. $\overset{\frown}{GJI}$

10. $\overset{\frown}{HGJ}$

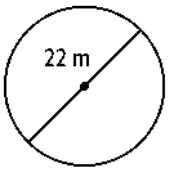
13. $\overset{\frown}{HJI}$

Find the circumference of each circle. Leave your answers in terms of π.

16.



17.



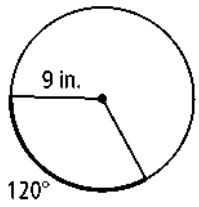
20. The wheels on Reggie's bike each have a 20-in. diameter. His sister's mountain bike has wheels that each have a 26-in. diameter. To the nearest inch, how much farther does Reggie's sister's bike travel in one revolution than Reggie's bike?

21. A Ferris wheel has a 50-m radius. How many kilometers will a passenger travel during a ride if the wheel makes 10 revolutions? Round your answer to the nearest tenth of a kilometer.

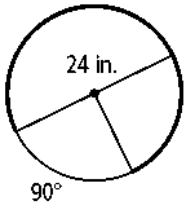
41. A 45° arc of $\odot D$ has the same length as a 30° arc of $\odot E$. What is the ratio of the radius of $\odot D$ to the radius of $\odot E$?

Find the length of each darkened arc. Leave your answer in terms of π.

23.



26.



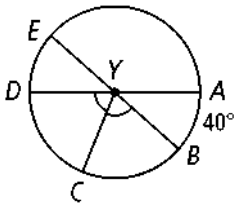
Find each indicated measure for $\odot Y$.

29. $m\angle EYD$

30. $m\widehat{EAB}$

32. $m\angle DYC$

33. $m\widehat{AEC}$



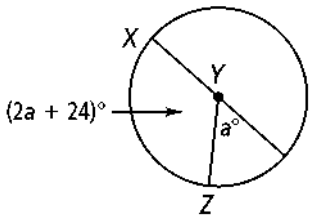
35. Kiley's in-line skate wheels have a 43-mm diameter. How many meters will Kiley travel after 5000 revolutions of the wheels on her in-line skates? Round your answer to the nearest tenth of a meter.

36. It is 5:00. What is the measure of the minor arc formed by the hands of an analog clock?

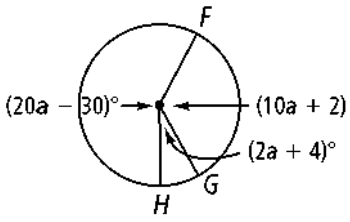
37. In $\odot B$, the length of $\widehat{ST}$ is 3π in. and $m\widehat{ST}$ is 120. What is the radius of $\odot B$?

Algebra Find the value of each variable.

38.



39.



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