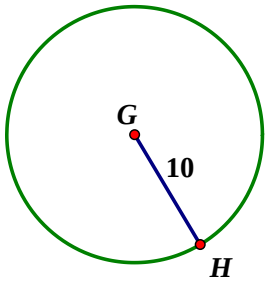
Unit 7 – Area of Sector Length of Arc Practice Name: _____

1. Given a circle with radius 10, what is the **area of a sector** having an arc of

a) 90° b) 72° c) 180°

d) 216° e) 324° f) $\frac{\pi}{3}$



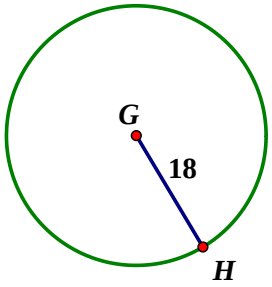
g) $\frac{7\pi}{6}$ h) $\frac{3\pi}{6}$

2. In a circle with radius 2, a sector has area π. What is the measure of the arc of the sector?

3. Given a circle with radius 18, how long is an arc of

a) 60° b) 90° c) 120°

d) 150° e) 180° f) 270°



g) $\frac{\pi}{4}$ h) $\frac{5\pi}{6}$ i) $\frac{4\pi}{3}$

4. What is the radius of a circle if the length of a 45° arc is 3π?

5. What is the radius of a circle if the length of a 72° arc is 4π?