Date\_

## 10.5 – Arc and Areas of Circles

Name the following in  $\bigcirc G$ .

- 1) the minor arcs
- 2) the major arcs
- 3) the semicircles

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

- 4)  $\widehat{GJ}$  5)  $\widehat{HI}$  6)  $\widehat{HIJ}$
- 7)  $\widehat{GJI}$  8)  $\widehat{GHJ}$  9)  $\widehat{GJH}$

## Find the length of each red arc. Leave your answer in terms of $\pi$ .











For the following:, leave your answers in terms of  $\pi$ .

30) If 
$$d = 6.4$$
 cm,  $A = 31$ ) If  $A = 529\pi$  cm<sup>2</sup>,  $r = 32$ ) If  $C = 36\pi$  cm,  $A = 32$ 

For the following, round your answers to the nearest 0.01 unit.

33) If r = 7.8 cm, A = 34) If A = 136.46, C = 35) If d = 3.12, A = 35

In the following, the two smaller circles are congruent. Find the area of the shaded region.



Refer to the figure of a circle inscribed in an equilateral triangle. Leave

37) Find the area of the inscribed circle.



38) Find the area of the shaded region.