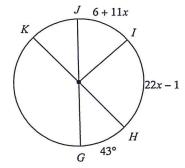
## Arc measure and arc length

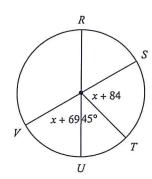
Period Date

Find the measure of the arc or central angle indicated. Assume that lines which appear to be diameters are actual diameters.

1)  $m\widehat{IH}$ 

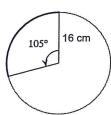


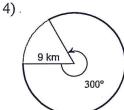
2) 
$$m\widehat{RT}$$



Find the length of each arc.

3)





5) 
$$r = 12 \text{ in}, \ \theta = 270^{\circ}$$

6) 
$$r = 9 \text{ km}, \ \theta = 240^{\circ}$$

7) A circle has an arc measure of 80 degrees and an arc length of  $88\pi$ . What is the diamter of the circle?