

Additional Problems Assignment 1

1. Find the radius of a circle for which an arc 10m long subtends an angle of:
 - (a) 1 rad
 - (b) $\frac{2}{3}$ rad
 - (c) 20°
 - (d) 50°
2. If the radius of an automobile wheel is 0.6 meters and rotates at 500 revolutions per minute, what is the speed of the car in km/h ? (Hint: Make sure you convert your units. You can check if your method works by applying it to problem 1.31 and see if you get the right answer.)