1. (5 points) A bicycle has wheels with 26” diameter, rotating at 380 revolutions per minute.
   
   (a) Find the angular velocity in radians per second.
   
   (b) How fast is the bicycle moving, in feet per second?

2. (5 points) Find \( \sin \theta \), \( \cos \theta \) and \( \tan \theta \) for \( \theta = \frac{5\pi}{3} \).

3. (5 points) Suppose that \( \cos t = \frac{1}{6} \), and that \( \csc t < 0 \).
   
   (a) In which quadrant does \( t \) lie?
   
   (b) Find the exact values of \( \sin t \) and \( \tan t \).