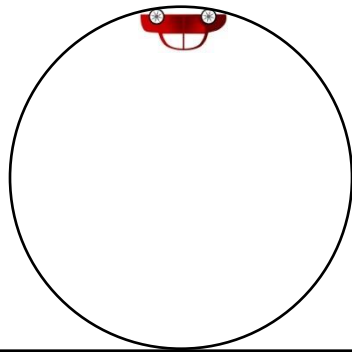


World's Largest Loop the Loop in a Car

Name: _____ Date: _____

“The largest loop the loop in a car measured 12.87 m (42 ft 2.69 in) in diameter and was achieved by Li Yatao (China) from the Car Team of Zhejiang Youngman Lotus Automobile Co., Ltd. in Shanghai, China, on 23 September 2011.” – *YouTube*

[http://youtu.be/aXdqxOcy_b8]



1. Calculate the minimum speed that Li Yatao must drive his car so that he will successfully make it around the loop. Convert your answer to km/h. Make the assumption that he maintains this speed through-out the stunt.
2. Assuming that Li did not want to put his life at risk going at this minimum speed calculate the size of the normal force that he would experience if he were moving 20% faster than the minimum required speed.