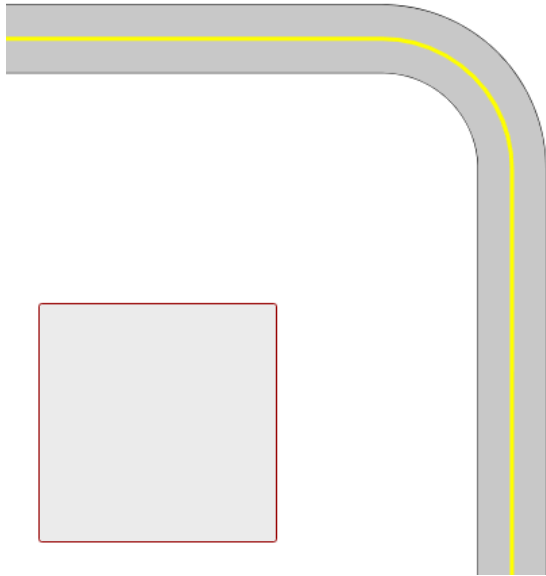


Car on Turn Problem

Step 1: Below is a picture of the turn in the road as viewed from above. Draw in your car at the point halfway through the turn. Show an arrow for the direction of force friction at that moment in time. Also fill in all the important information about your system in the box next to the picture below. Show your calculation for the force gravity on the car, the force normal from the roadway and the maximum force friction allowing it to go around the turn.



Step 2: Use Newton's 2nd law to get the maximum safe acceleration for going around that turn. Show your calculation below

Step 3: Now show your calculation on finding the maximum safe speed for going around the turn

Step 4: Enter your answers into your program to check that you did everything properly