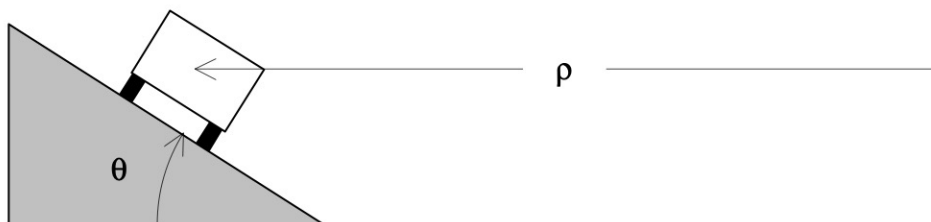


Homework H.4.D

Given: The race car, shown below, travels around a banked curve at Daytona International Speedway.

Find: Determine:

- The speed at which the race car can circumvent the curve without the assistance of a lateral friction force;
- The maximum speed the race car can circumvent the curve with the assistance of a lateral friction force.



Use the following parameters in your analysis: $\theta = 25^\circ$, $\mu_s = 0.85$ and $\rho = 450$ m.