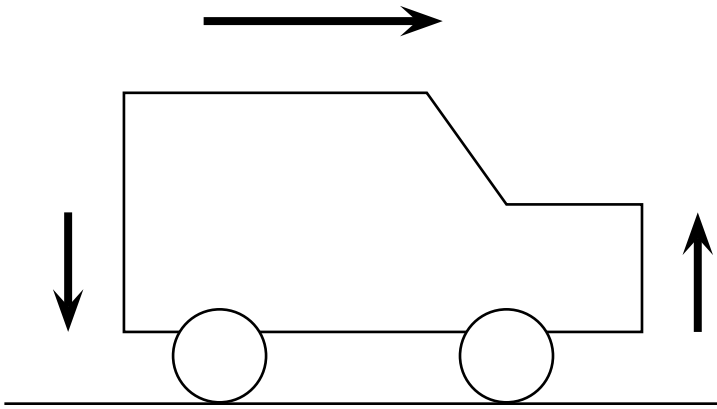


When a car accelerates forward, it tends to rotate about its center of mass.



The front end of the car will move upward

- A) when the car has rear wheel drive, however the front end of the car will move downward if the car has front wheel drive.
- B) whether-or-not the driving force is imposed by the rear or the front wheels.

In all cases the force of friction exerted by the road on the car is forward and it is below the center of gravity of the car, see sketch.

This leads to, regardless whether it is front drive, or rear drive, or front/rear drive, a counterclockwise rotation.

So the car noses up.

By the way, when the brakes are applied, the friction force is in the opposite direction, the car noses downward.

Answer **B**.

10.06-02`Nosing`Car 2006-10-10