Draw a free-body diagram of an automobile of weight $W$ that has a wheel base of length $L$ during four-wheel braking. The center of gravity is a distance $c$ forward of the rear axle and a distance of $h$ above the ground. The coefficient of friction between the pavement and the tires is $\mu$. Also show that the load carried by the two front tires during braking with the motor disconnected is equal to $W(c + \mu h)/L$. 