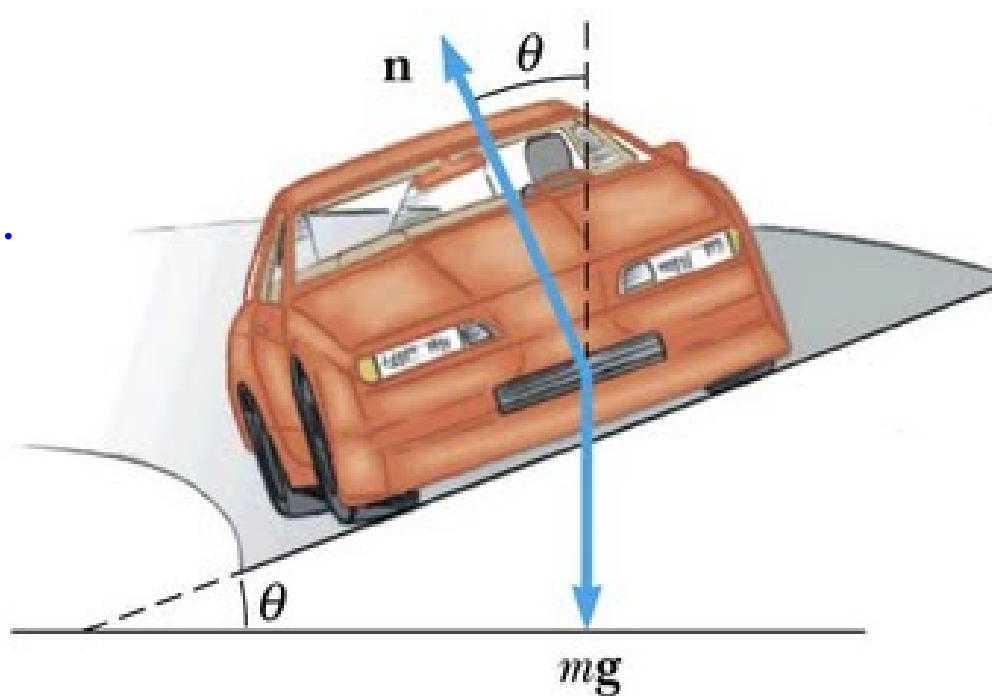


Banked Curves...

..when a road is properly banked a car can round a turn without relying on friction.



1. A car can barely negotiate a 50.0m unbanked curve when the coefficient of friction is 0.80. What is its speed?

How much must the road be banked if the car is to safely go around without relying on friction?

2. A frictionless curve is banked at 15° above the horizontal. What is the maximum speed at which the car can make it around the turn if the radius is 150m?

3. At what angle should an airplane be banked when travelling at 195 m/s around a turn whose radius is 8250m?

4. A jet ($m=2.00 \times 10^5 \text{kg}$), flying at 123m/s , banks to make a horizontal circular turn. The radius of the turn is 3810m .

Calculate the lift force.

Other examples...?

...skateboard park

...roulette table

Just for you...!

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**Formula is given*

Multiple Choice

