9 In a racetrack, a circular corner of radius *r* is banked at an angle of θ to the horizontal. The maximum friction between the track and a car of mass *m* is *f*. If the maximum speed with which it can negotiate the turn without any skidding is *v*, which of the following equations is correct?

A $N\sin\theta - f\cos\theta = \frac{mv^2}{r}$

B $N\sin\theta + f\cos\theta = \frac{mv^2}{r}$

C $N\cos\theta - f\sin\theta = \frac{mv^2}{r}$

D $N\cos\theta + f\sin\theta = \frac{mv^2}{r}$