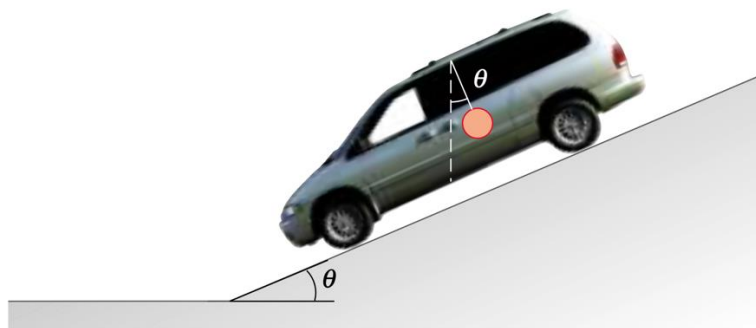**5** The figure shows a car accelerating down a slope, going from rest to 30 m s⁻¹ in 6.0 s. The slope is angled at θ above the horizontal.

During the acceleration, a ball hangs by a string from the car's ceiling. The acceleration is such that the string remains perpendicular to the ceiling.

What is the angle θ?

A	0	**B**	27°
C	31°	**D**	59°