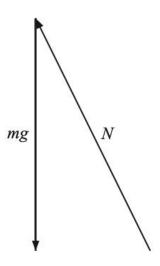


The free body diagram above shows a car going clockwise around a corner on a banked track without relying on friction.

(a) Complete the vector diagram, showing how these two forces result in a centripetal force. Indicate where the angle θ is on your diagram. (2 marks)



(b)	With reference to your diagram in part (a), describe why increasing the angle of the track	
	allows the cars to go around the same radius curve at a greater speed.	(2 marks)
	t o.	