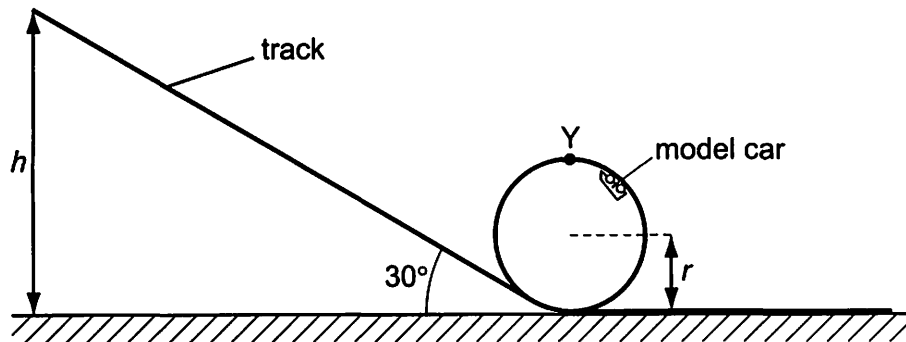


13 A model car is released from rest at a height  $h$  on a frictionless track.



For the car to go around the loop of radius  $r$  without leaving the track, it must be travelling at a speed of at least  $\sqrt{gr}$  at point Y.

What is the minimum possible value of the height  $h$  required for the car to remain on the track while going around the loop?

- A  $2.5r$                       B  $2.75r$                       C  $3.0r$                       D  $4.0r$