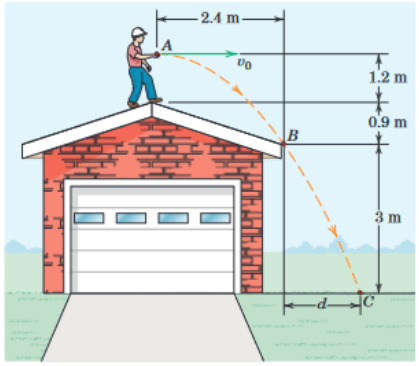
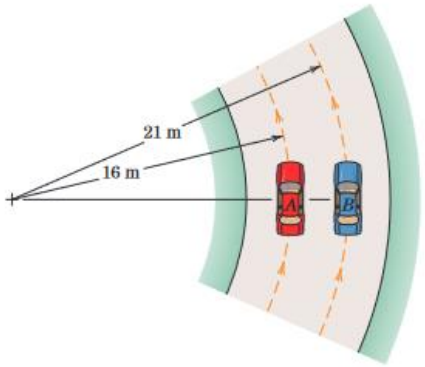
Problemas sugeridos

Repita los problemas de la semana anterior en un cuaderno de Jupyter usando la librería sympy

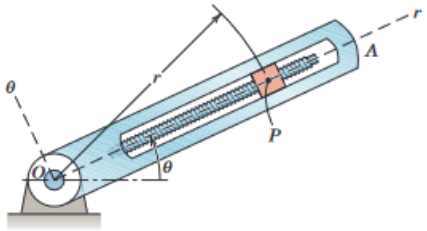
2/67 A roofer tosses a small tool to the ground. What minimum magnitude v_0 of horizontal velocity is required to just miss the roof corner B? Also determine the distance d.



2/97 Determine the maximum speed for each car if the normal acceleration is limited to $0.88g$. The roadway is unbanked and level.



2/131 The position of the slider P in the rotating slotted arm OA is controlled by a power screw as shown. At the instant represented, $\dot{\theta} = 8$ rad/s and $\ddot{\theta} = -20$ rad/s^2. Also at this same instant, $r = 200$ mm, $\dot{r} = -300$ mm/s, and $\ddot{r} = 0$. For this instant determine the r- and θ-components of the acceleration of P.



Problem 2/131

Aspectos a dominar:

- Trayectoria de partículas
- Derivación e integración en cinemática
- Movimiento general en diferentes sistemas de coordenadas
- Su solución simbólica en computador usando sympy CAS

HINT: https://youtu.be/fM8fcV38h4E