

SOLUCION TALLER N. 2

- 3.157** a) $\mathbf{F}_B = -(80.0 \text{ N})\mathbf{k}$; $\mathbf{F}_C = -(30.0 \text{ N})\mathbf{i} + (40.0 \text{ N})\mathbf{k}$.
 b) $R_y = 0$; $R_z = -40.0 \text{ N}$. c) Cuando la ranura está en posición vertical.

3.141 $\mathbf{R} = (20.0 \text{ N})\mathbf{i} + (30.0 \text{ N})\mathbf{j} - (10.00 \text{ N})\mathbf{k}$;
 $y = -0.540 \text{ m}$, $z = -0.420 \text{ m}$.

- 3.124** a) $\mathbf{R} = -(28.4 \text{ N})\mathbf{j} - (50.0 \text{ N})\mathbf{k}$;
 $\mathbf{M} = (8.56 \text{ N} \cdot \text{m})\mathbf{i} - (24.0 \text{ N} \cdot \text{m})\mathbf{j} + (2.13 \text{ N} \cdot \text{m})\mathbf{k}$.
 b) En contra de las manecillas del reloj.

3.122 $\mathbf{A} = (1.600 \text{ lb})\mathbf{i} - (36.0 \text{ lb})\mathbf{j} + (2.00 \text{ lb})\mathbf{k}$;
 $\mathbf{B} = -(9.60 \text{ lb})\mathbf{i} + (36.0 \text{ lb})\mathbf{j} + (2.00 \text{ lb})\mathbf{k}$.

3.119 $\mathbf{R} = -(420 \text{ N})\mathbf{i} - (50.0 \text{ N})\mathbf{j} - (250 \text{ N})\mathbf{k}$;
 $\mathbf{M} = (30.8 \text{ N} \cdot \text{m})\mathbf{j} - (22.0 \text{ N} \cdot \text{m})\mathbf{k}$.

- 3.115** a) 0.365 m arriba de G. b) 0.227 m a la derecha de G.

3.108 $\mathbf{R} = 72.4 \text{ lb} \searrow 81.9^\circ$; $\mathbf{M} = 206 \text{ lb} \cdot \text{ft}$.

3.104 Sistema fuerza-par en D.

3.55 $-90.0 \text{ N} \cdot \text{m}$.

3.78 $M = 1\,170 \text{ lb} \cdot \text{in.}$; $\theta_x = 81.2^\circ$, $\theta_y = 13.70^\circ$, $\theta_z = 100.4^\circ$.