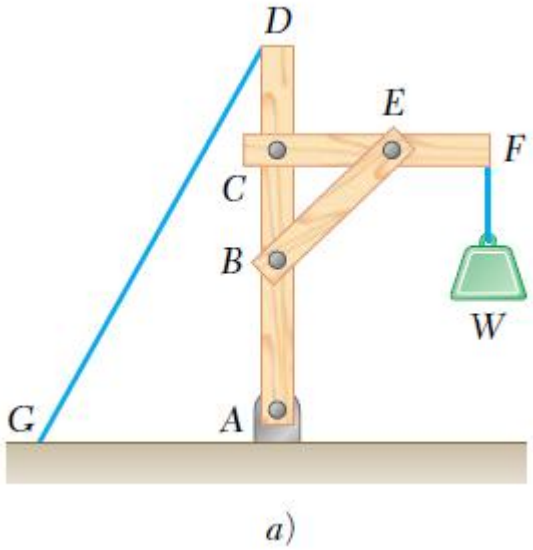
ARMAZONES, MAQUINAS Y ESTRUCTURAS

Son estructuras las cuales están sometidas a múltiples fuerzas y están diseñadas para soportar carga.

Fuerzas externas



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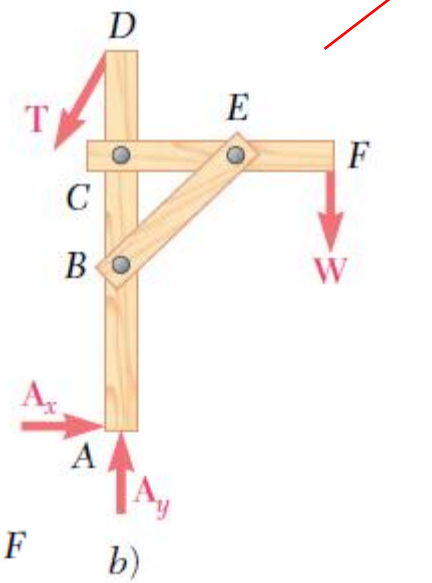
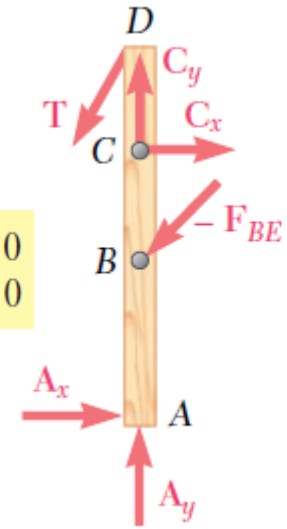
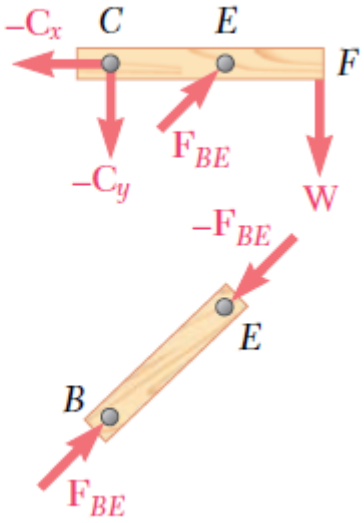
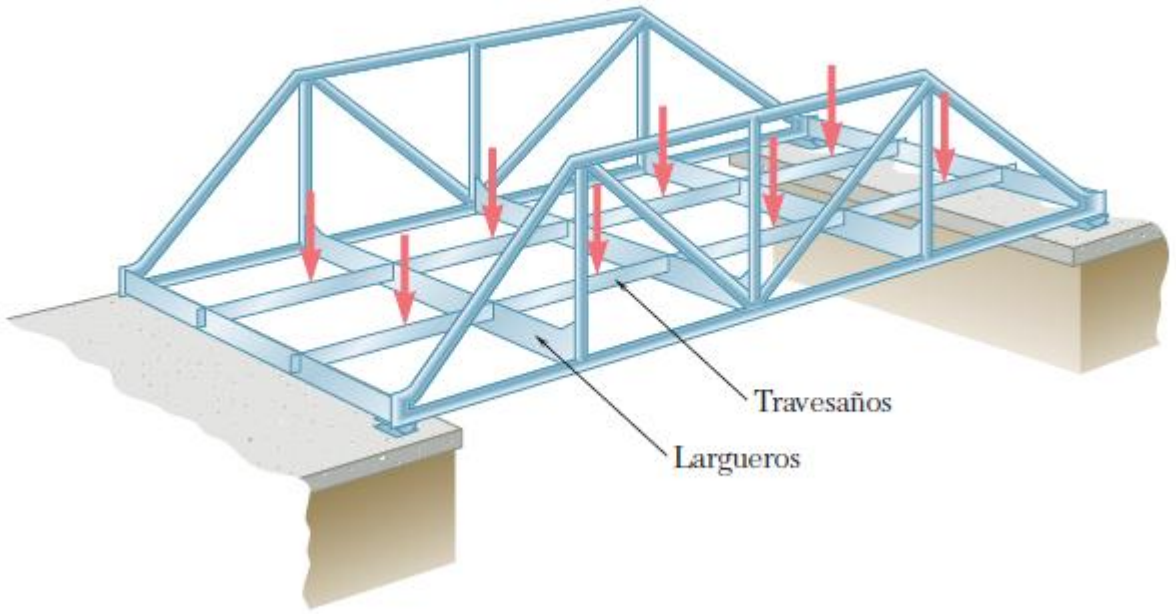


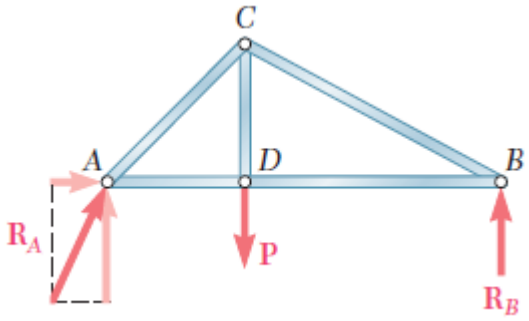


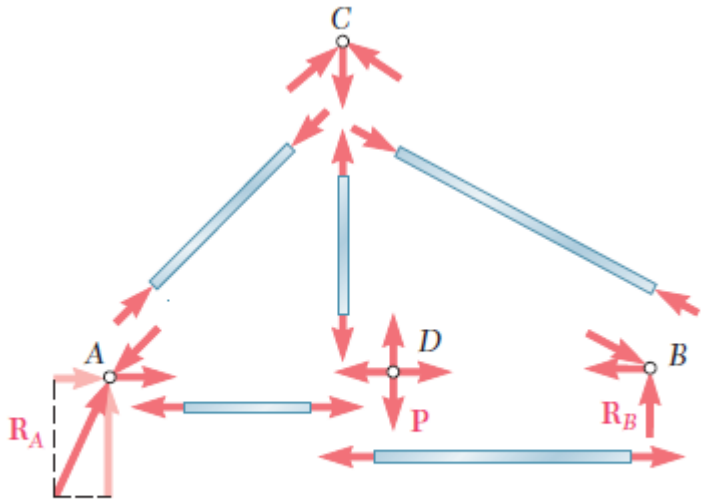


Fuerzas internas

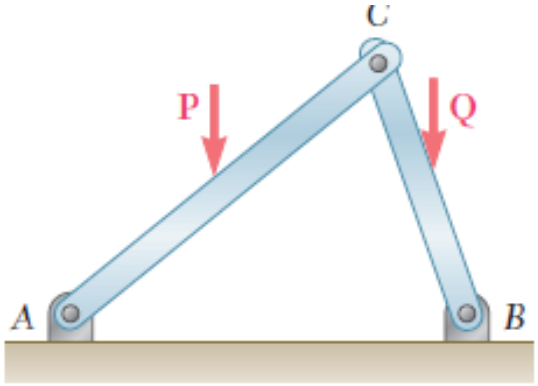
$$\Sigma F_x = 0 \quad \Sigma F_y = 0 \quad \Sigma F_z = 0$$
$$\Sigma M_x = 0 \quad \Sigma M_y = 0 \quad \Sigma M_z = 0$$







b)



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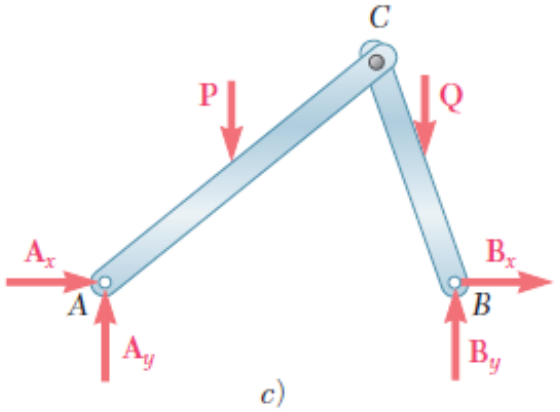
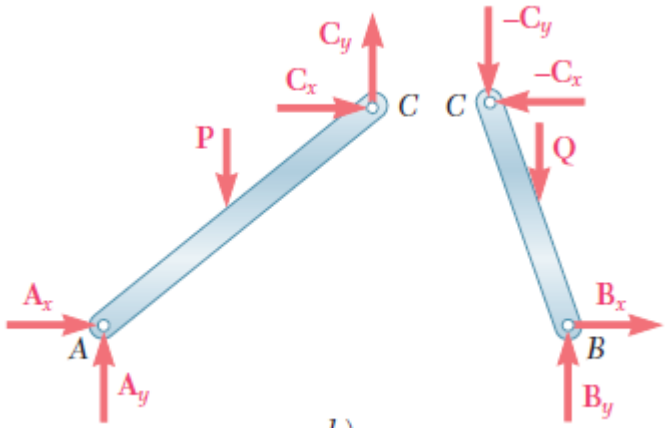


c)

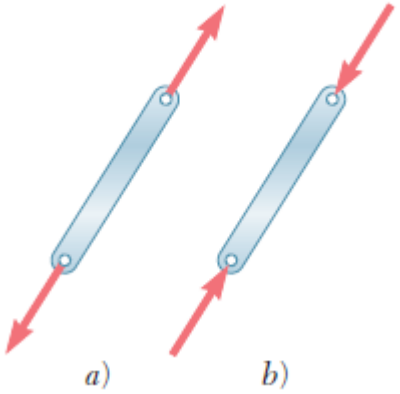
$$\Sigma F_x = 0 \quad \Sigma F_y = 0 \quad \Sigma F_z = 0$$
$$\Sigma M_x = 0 \quad \Sigma M_y = 0 \quad \Sigma M_z = 0$$

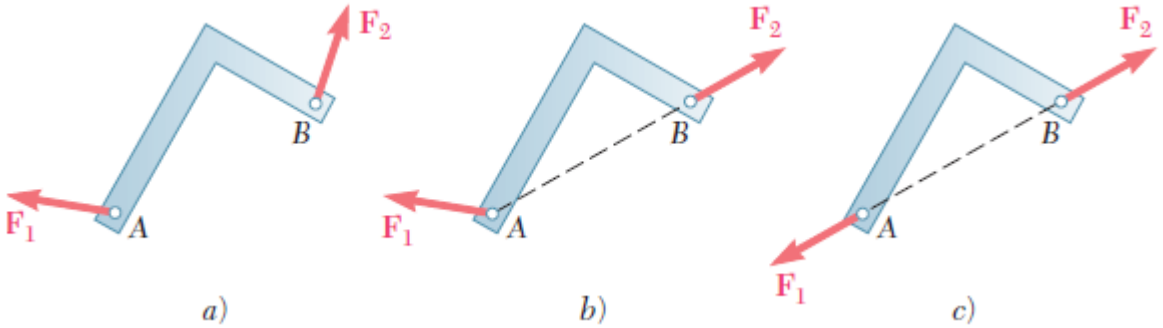


b)

ELEMENTOS SOMETIDOS A DOS FUERZAS

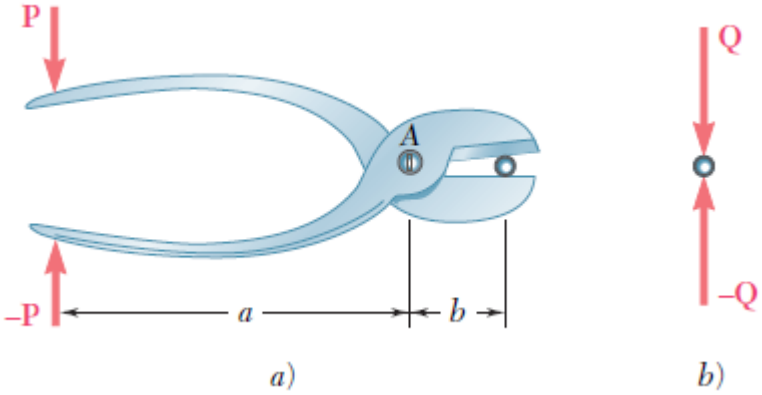
Son elementos sometidos a una sola fuerza la cual se conoce su dirección pero no su magnitud.

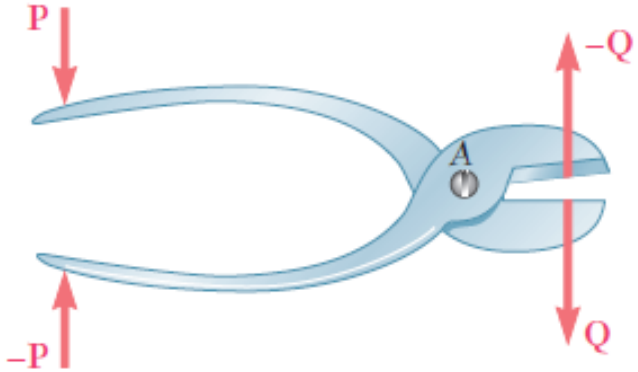


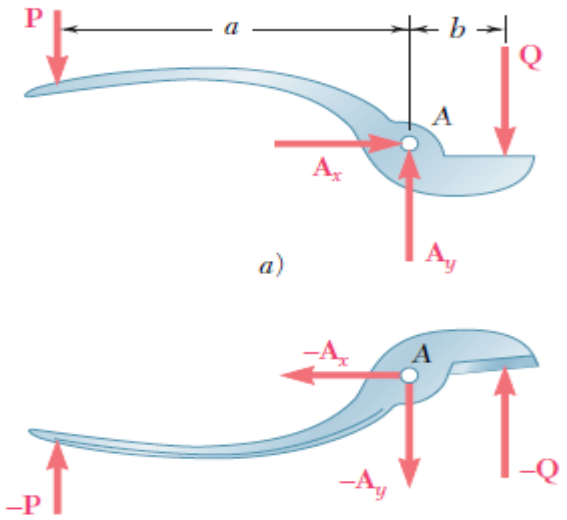


MAQUINAS

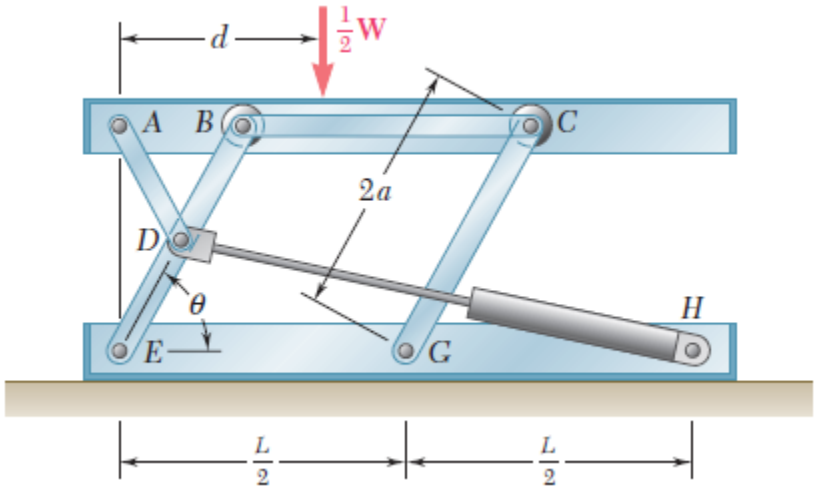
Están diseñadas para transmitir y modificar fuerzas







EJEMPLO



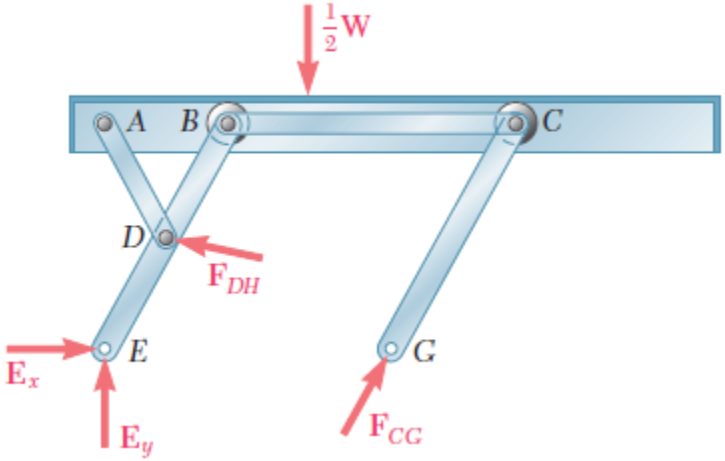
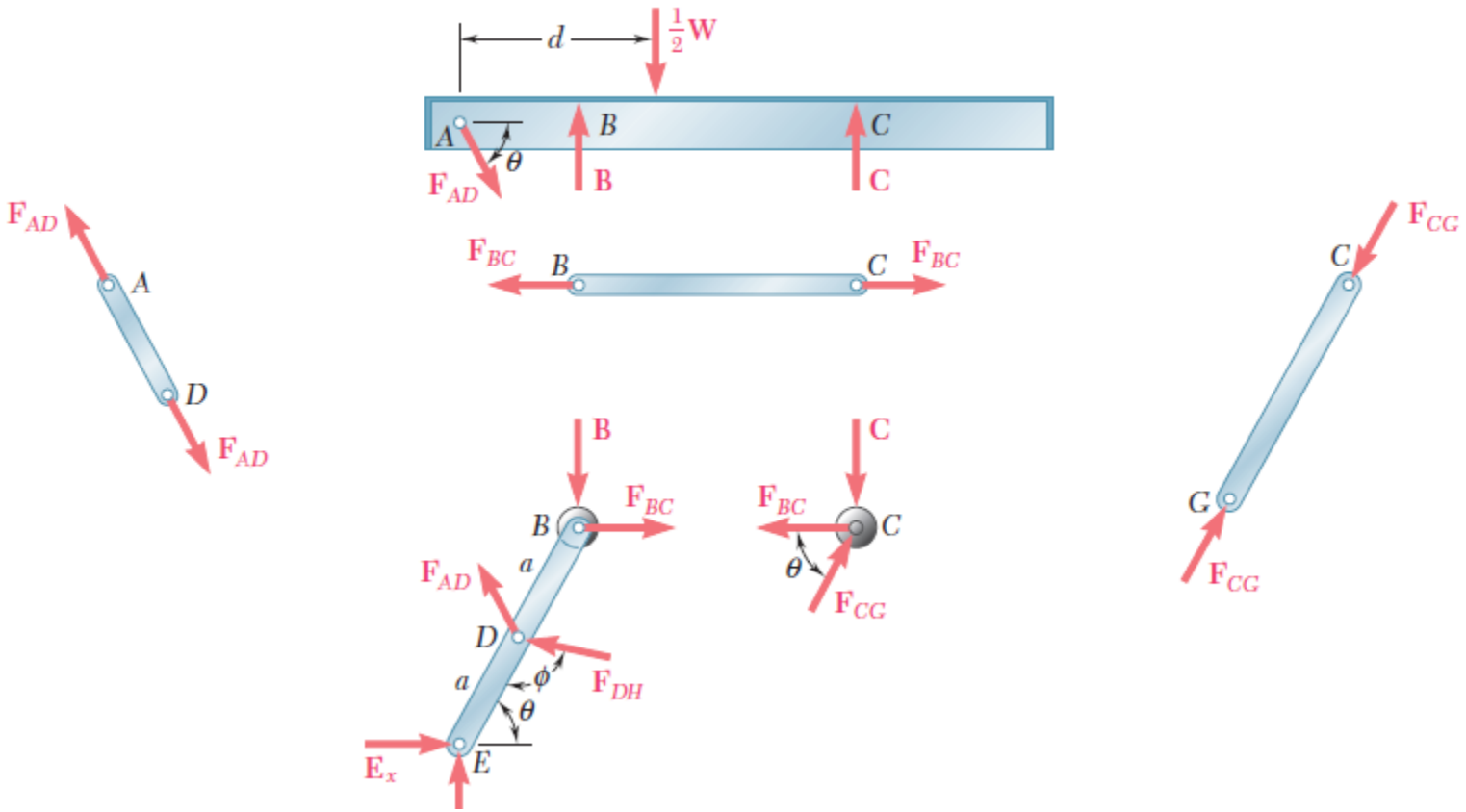
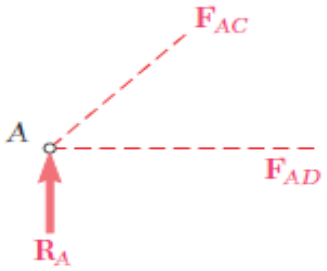
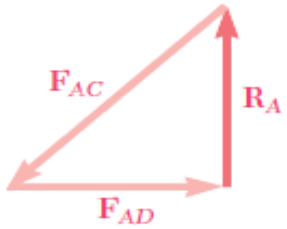
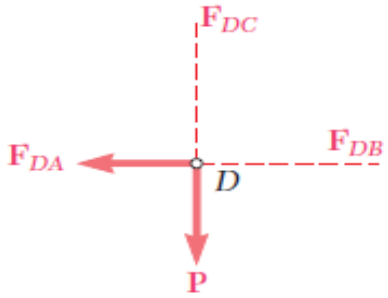
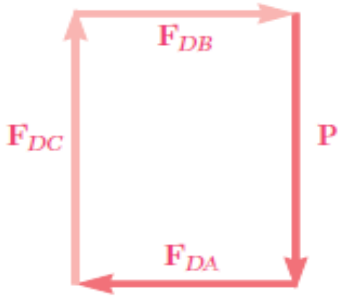
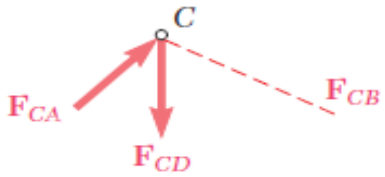
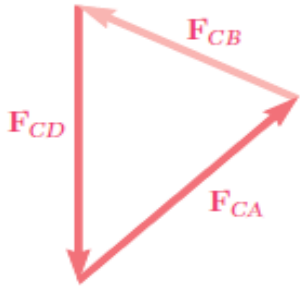


DIAGRAMA DE CUERPO LIBRE DE LAS PIEZAS



TIPOS DE NODOS

	Diagrama de cuerpo libre	Polígono de fuerza
Nodo *A*		
Nodo *D*		
Nodo *C*		
Nodo *B*