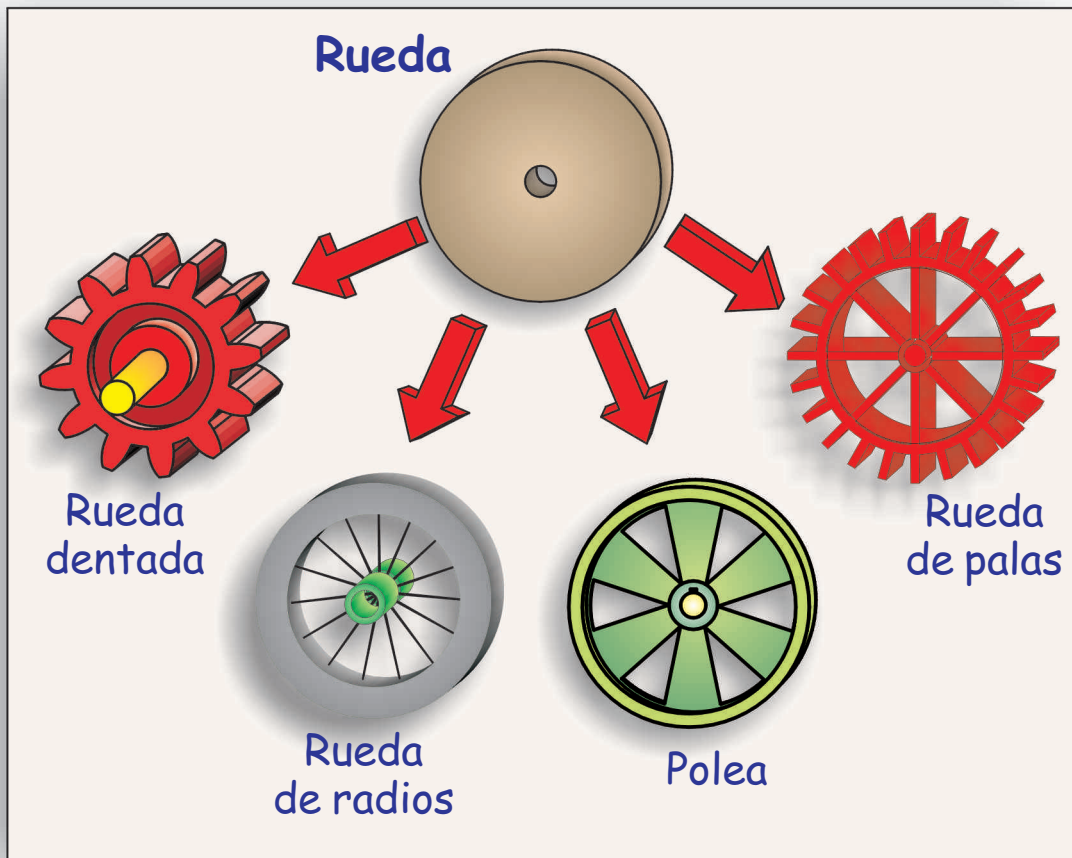
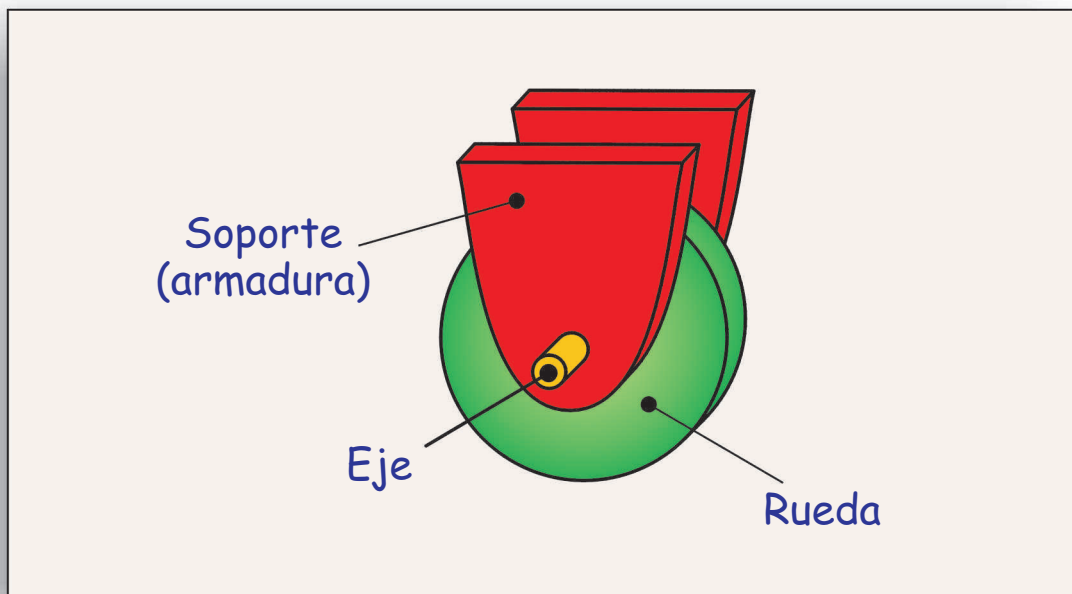


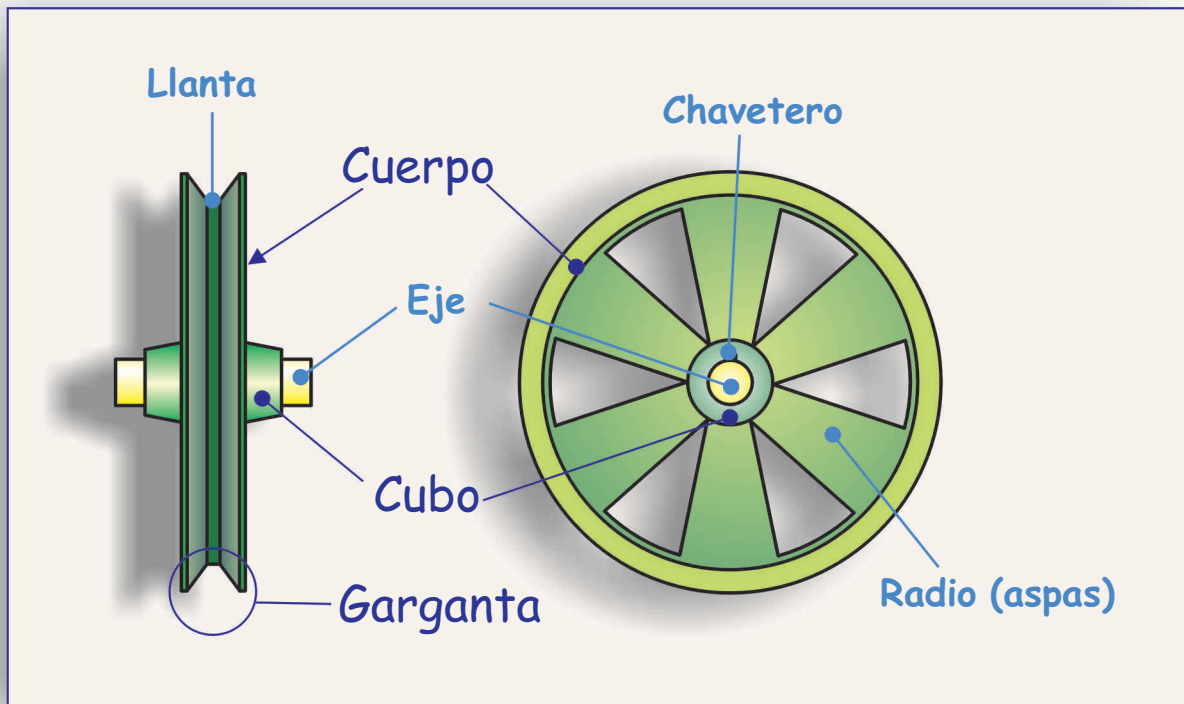
# RUEDA



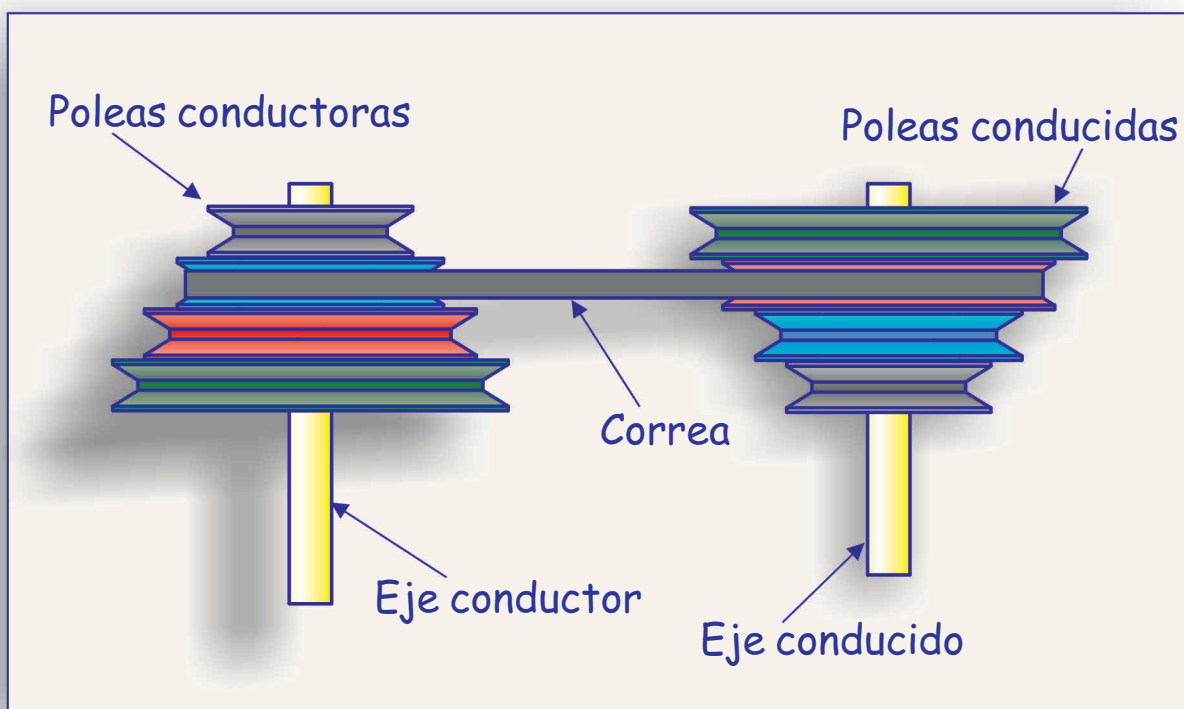
Disco que gira guiado por un eje centrado que, a su vez, se apoya en unos soportes (armadura)



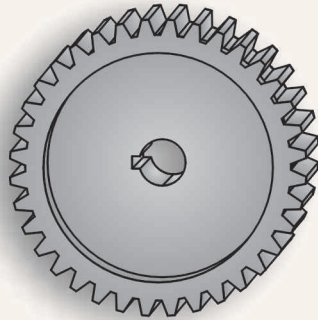
# POLEA



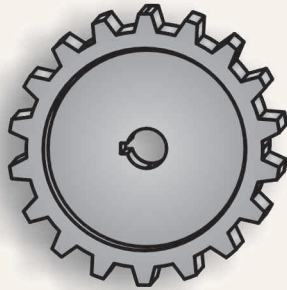
Rueda acanalada en su perímetro. Permite la transmisión de movimientos giratorios entre ejes mediante correas.



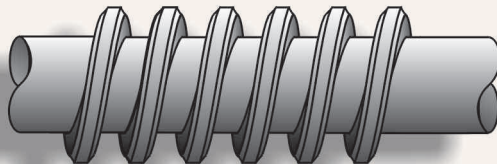
# **RUEDA DENTADA**



**Engranaje recto**



**Piñón de bicicleta**

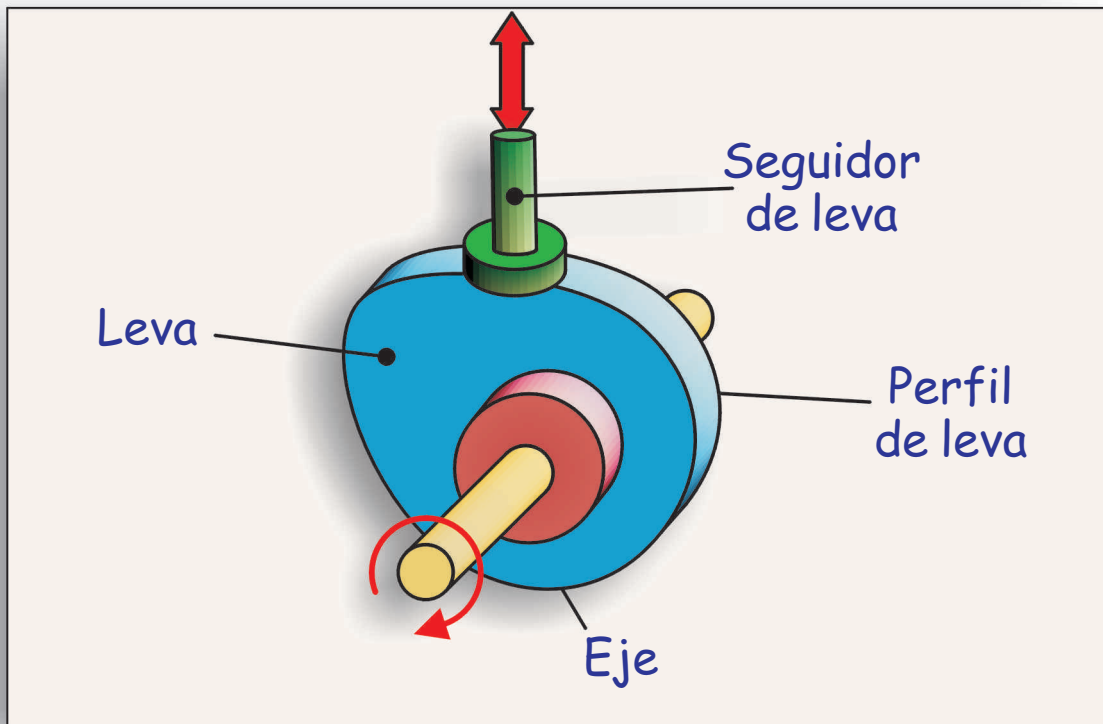


**Tornillo sinfín**

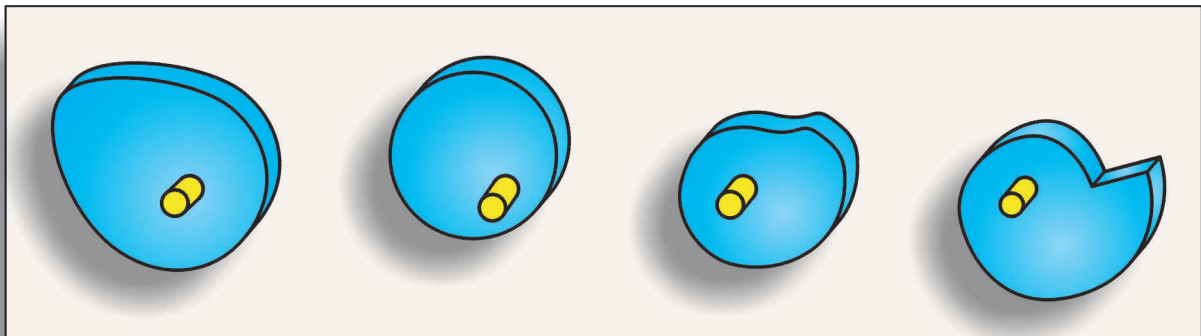


**Cremallera**

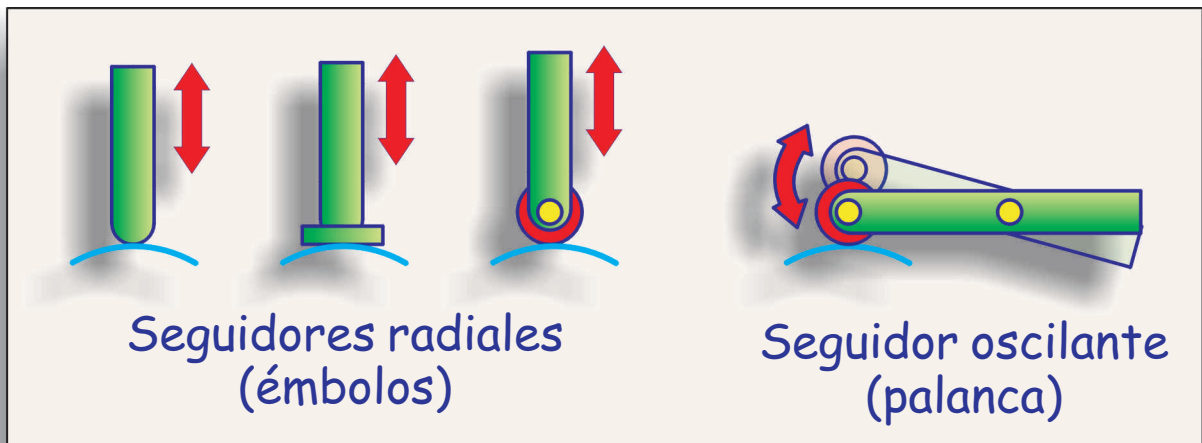
# LEVA



## Ejemplos de levas

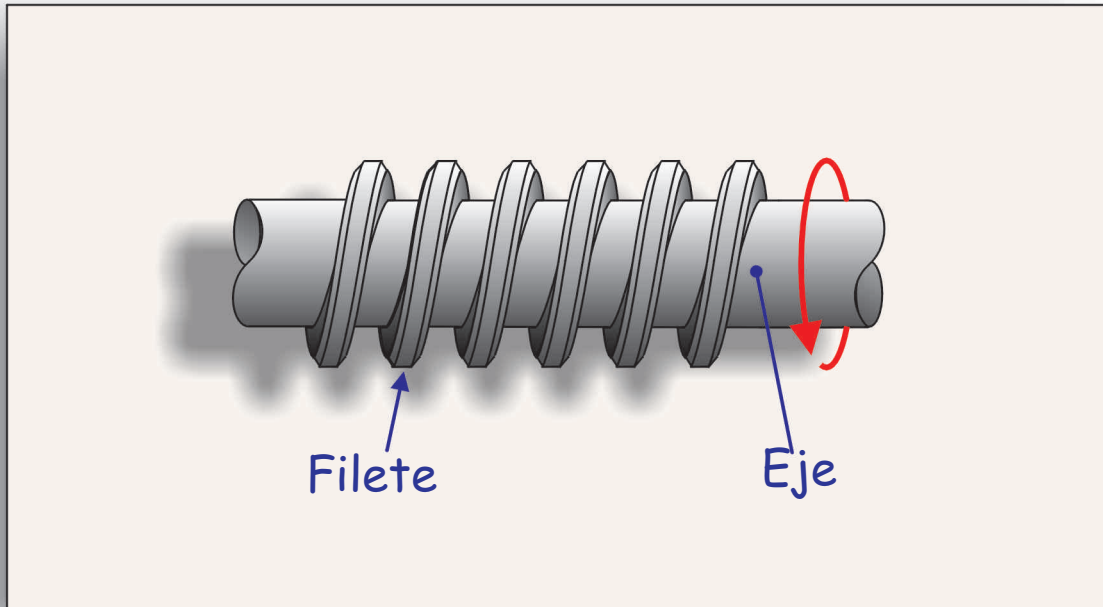


## Tipos de seguidores

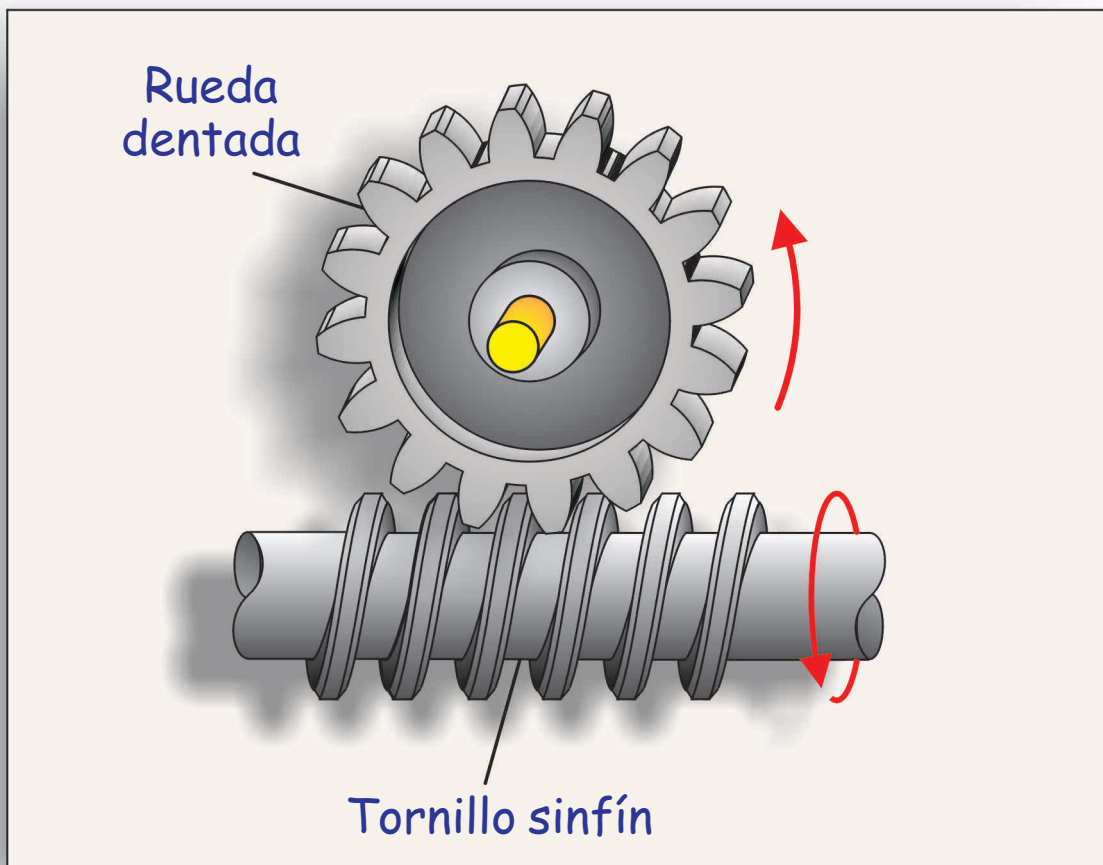




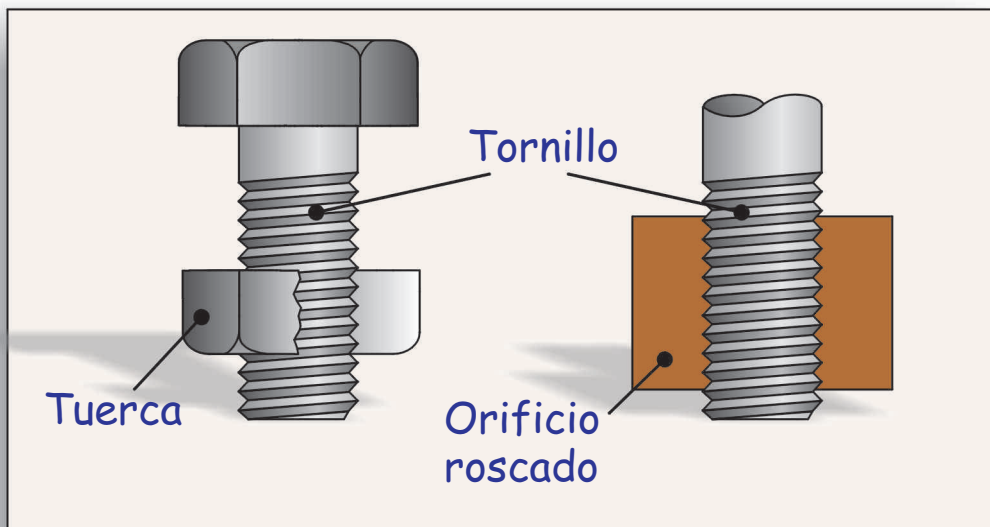
# TORNILLO SINFIN



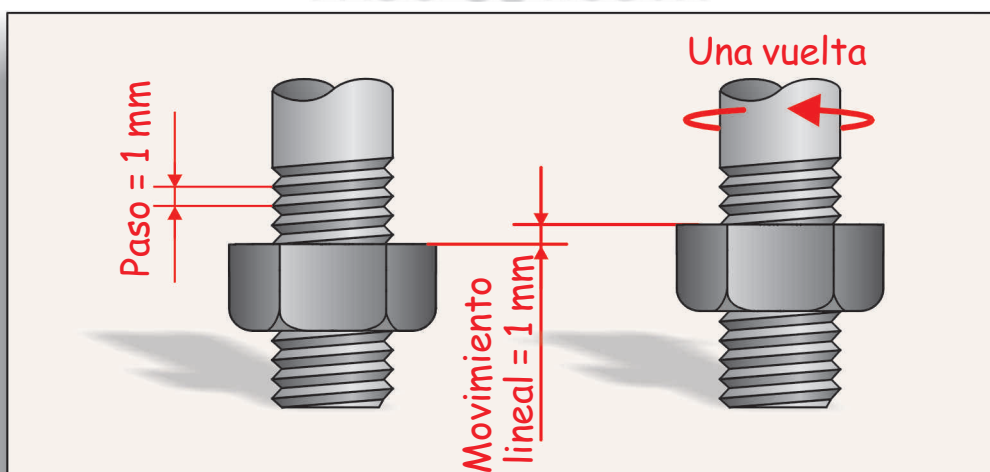
Tornillo sin cabeza  
acoplado directamente a un eje motriz



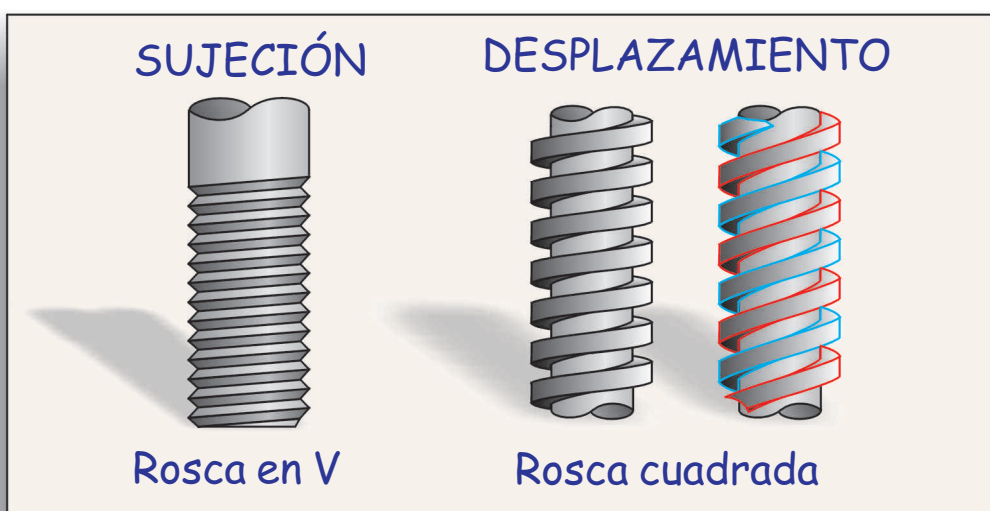
# TORNILLO Y TUERCA



## PASO DE ROSCA

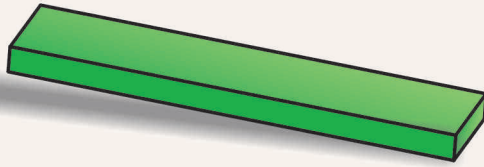


## TIPOS DE ROSCAS



# PALANCA

## ELEMENTOS DE LA PALANCA



Barra



Punto de apoyo  
(Fulcro)

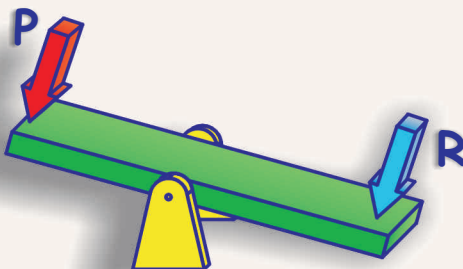


Potencia

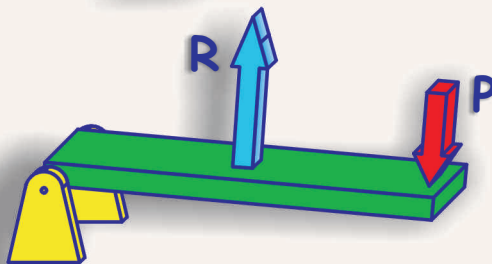


Resistencia

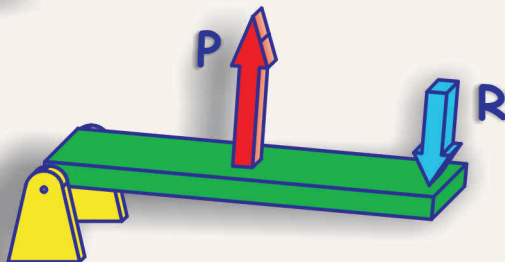
## TIPOS DE PALANCAS



1<sup>er</sup> grado

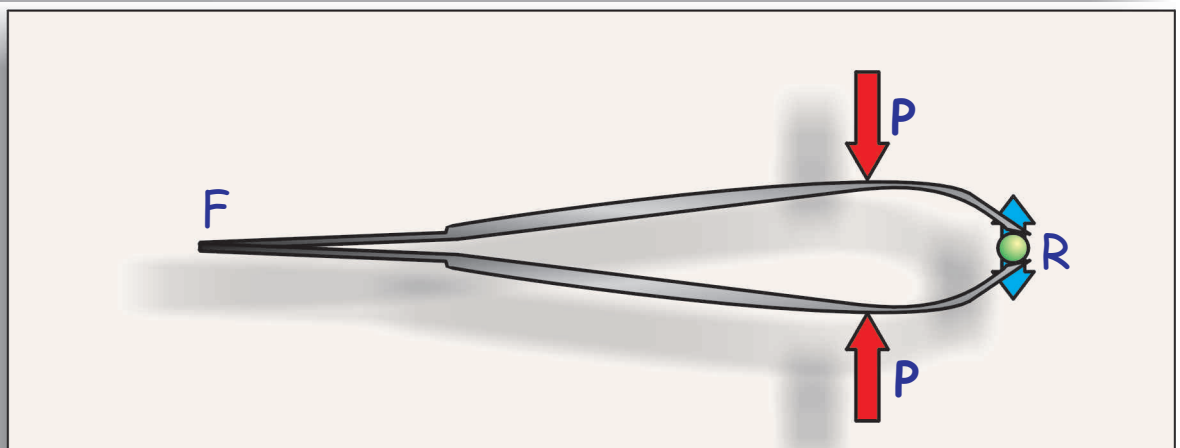
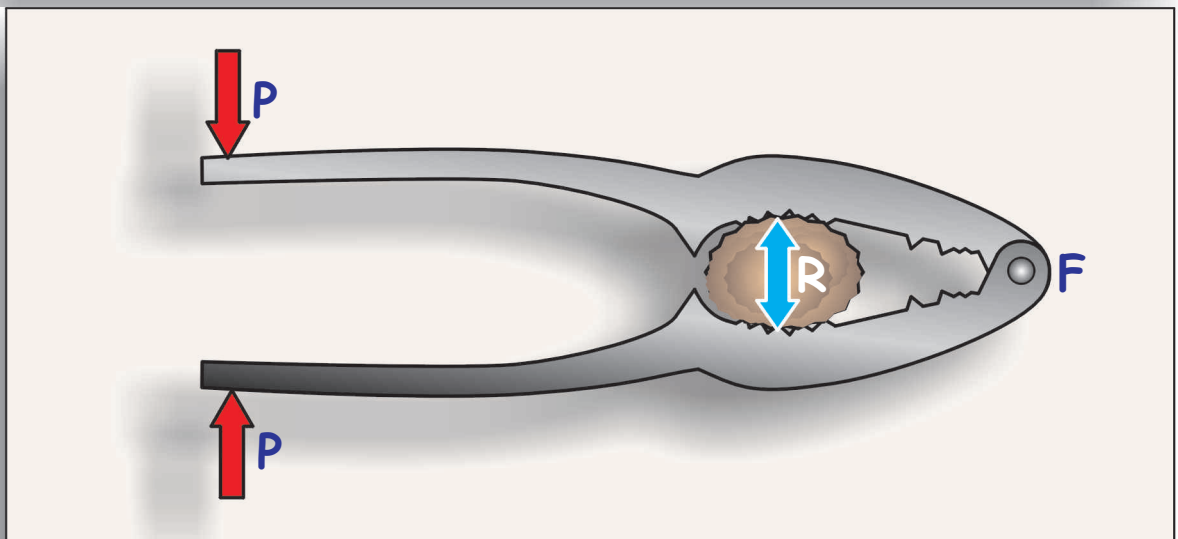
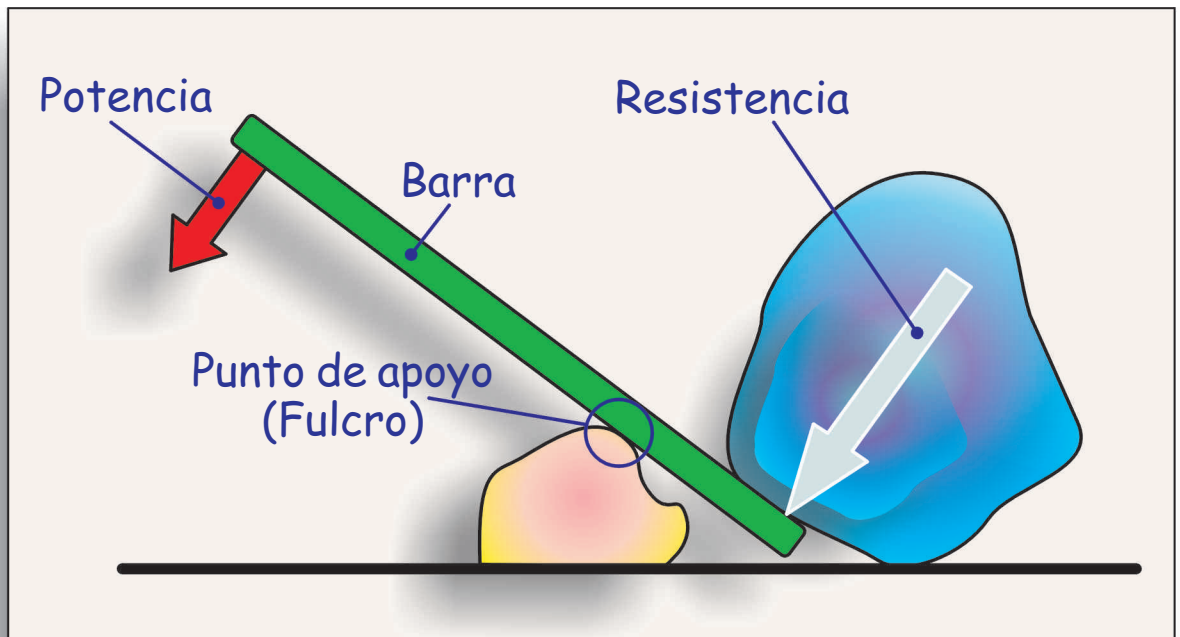


2º grado

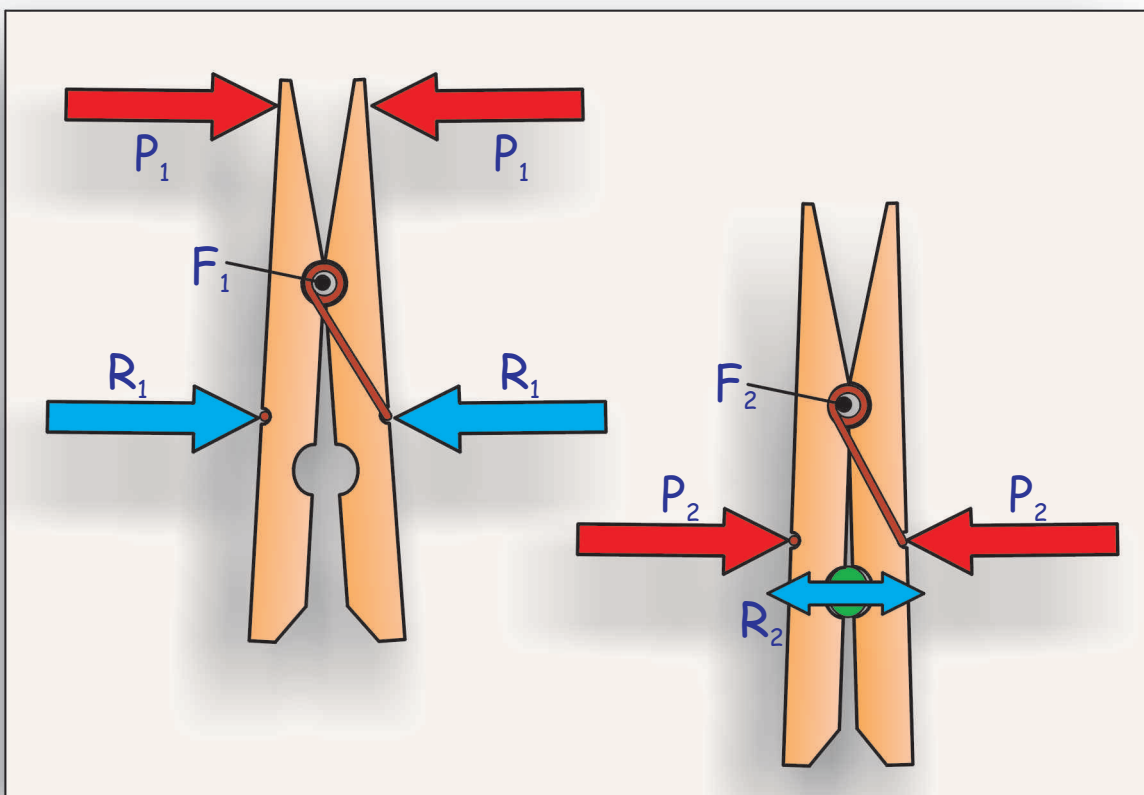
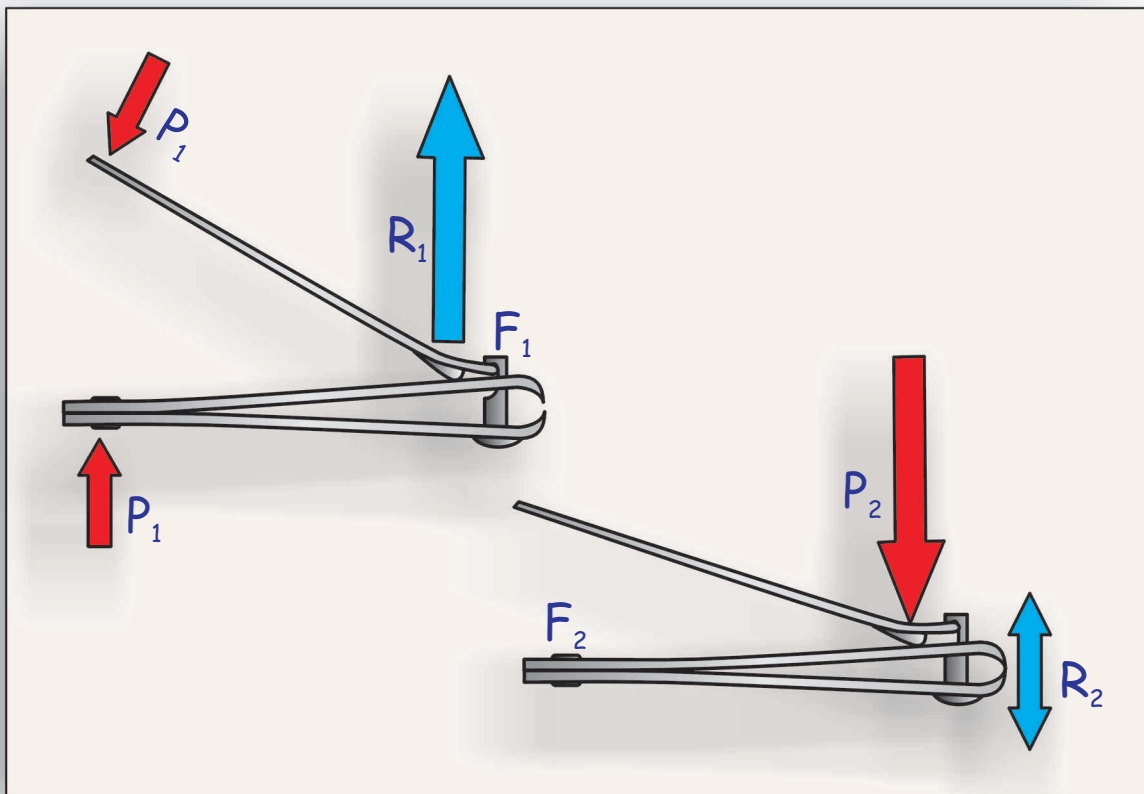


3<sup>er</sup> grado

# PALANCA (ejemplos)

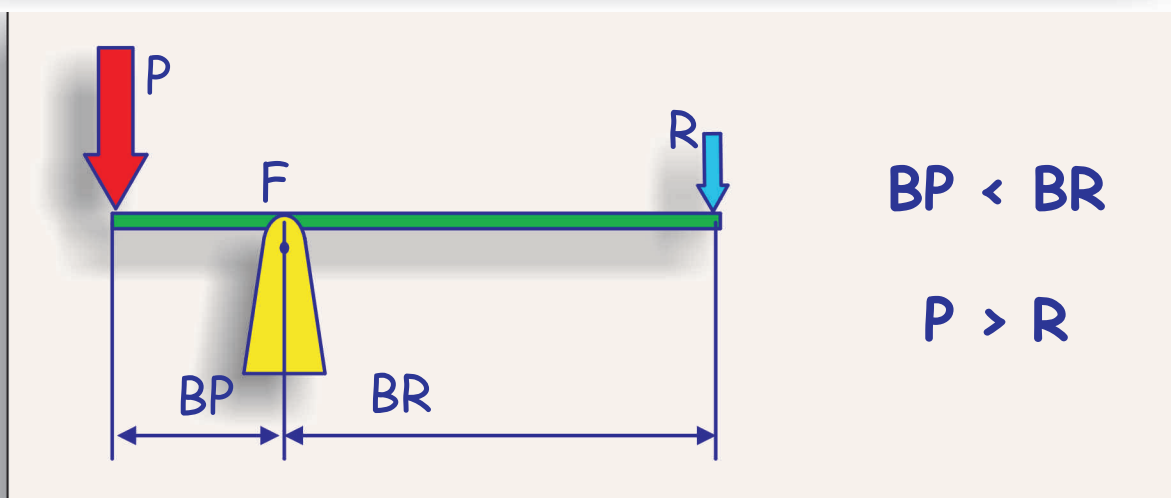
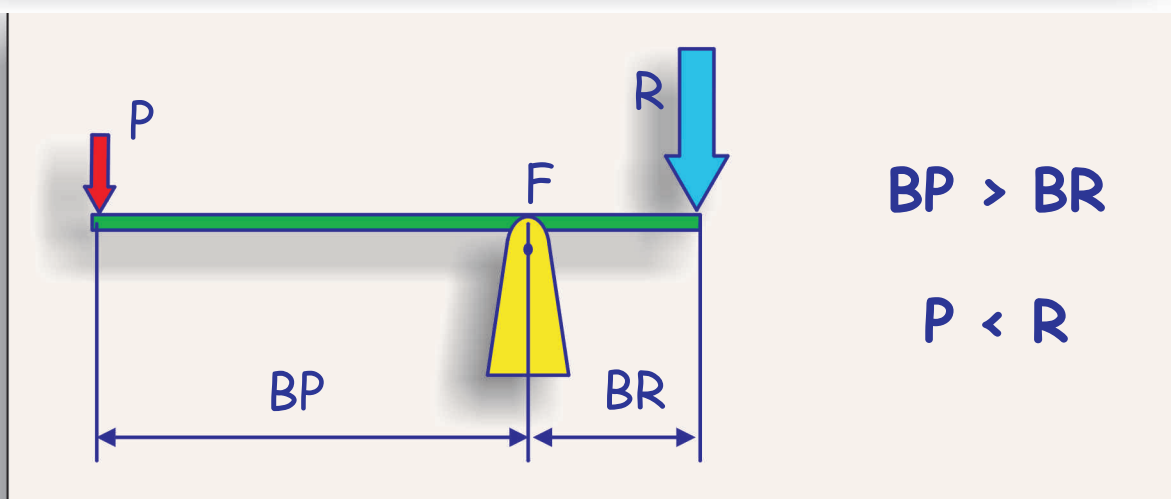
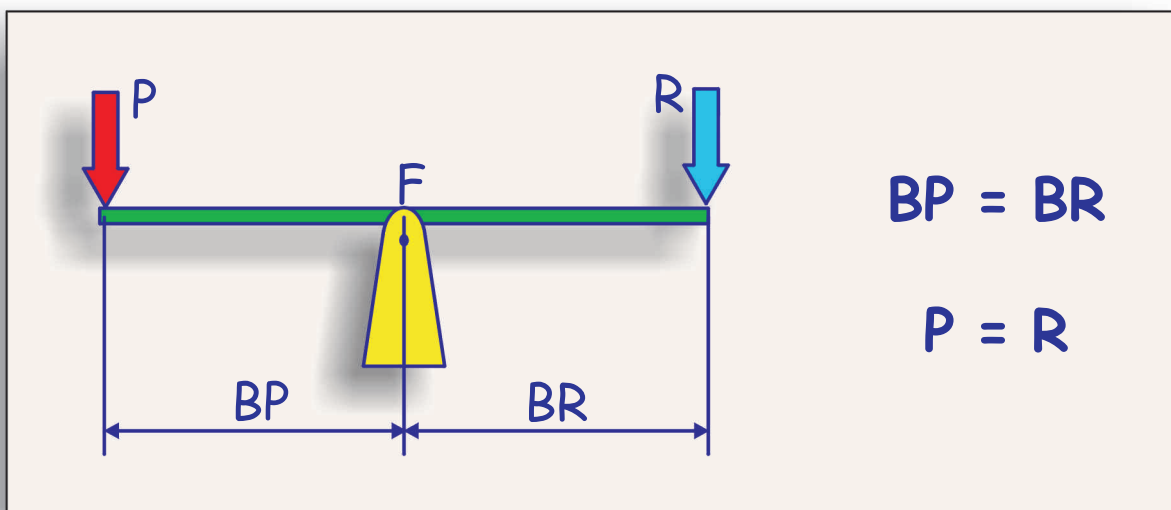


## PALANCA (ejemplos)



# PALANCA de 1<sup>er</sup> GRADO

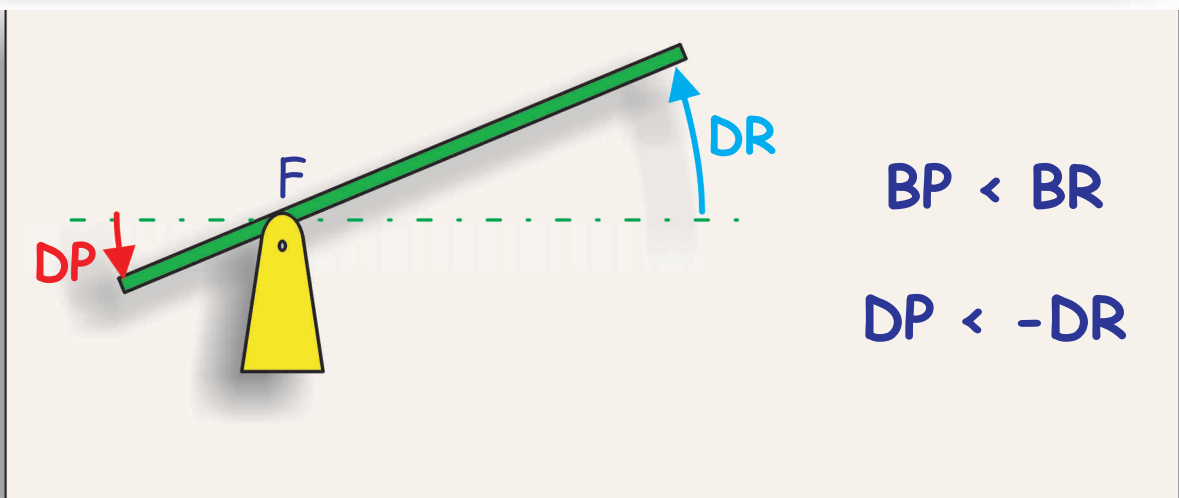
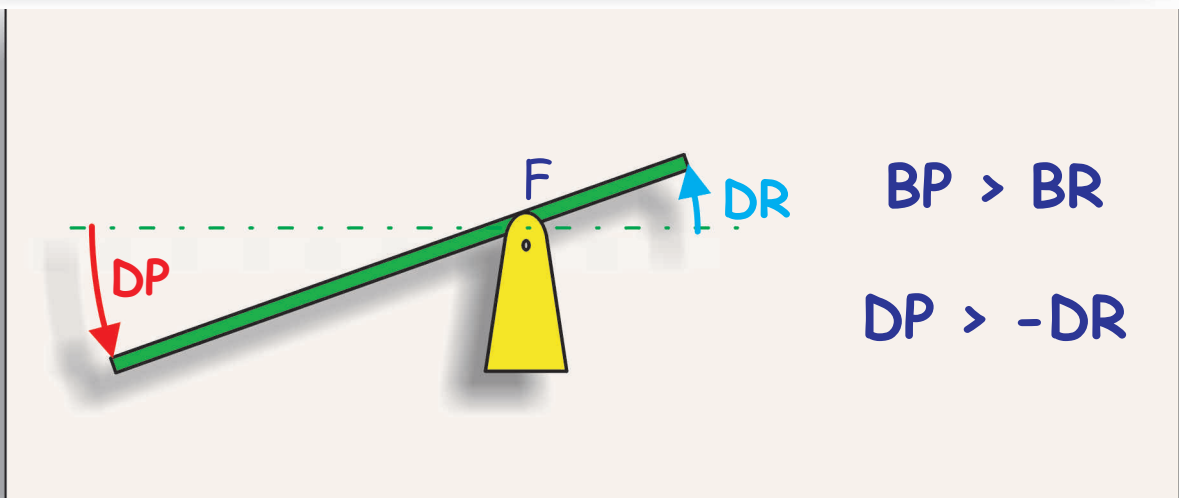
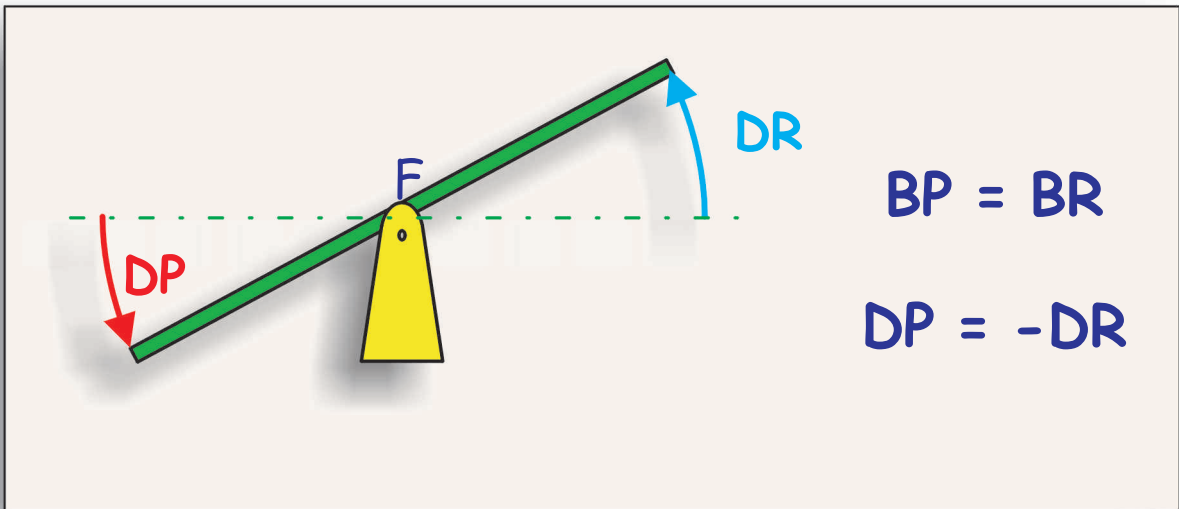
## FUERZAS





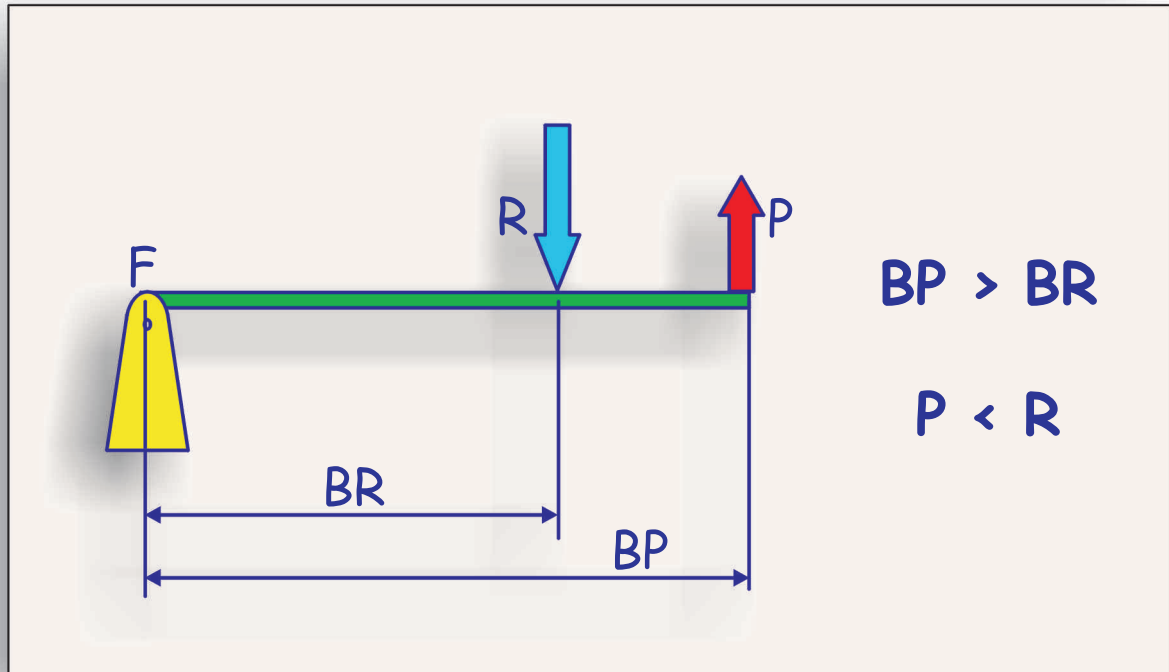
# PALANCA de 1<sup>er</sup> GRADO

## MOVIMIENTOS

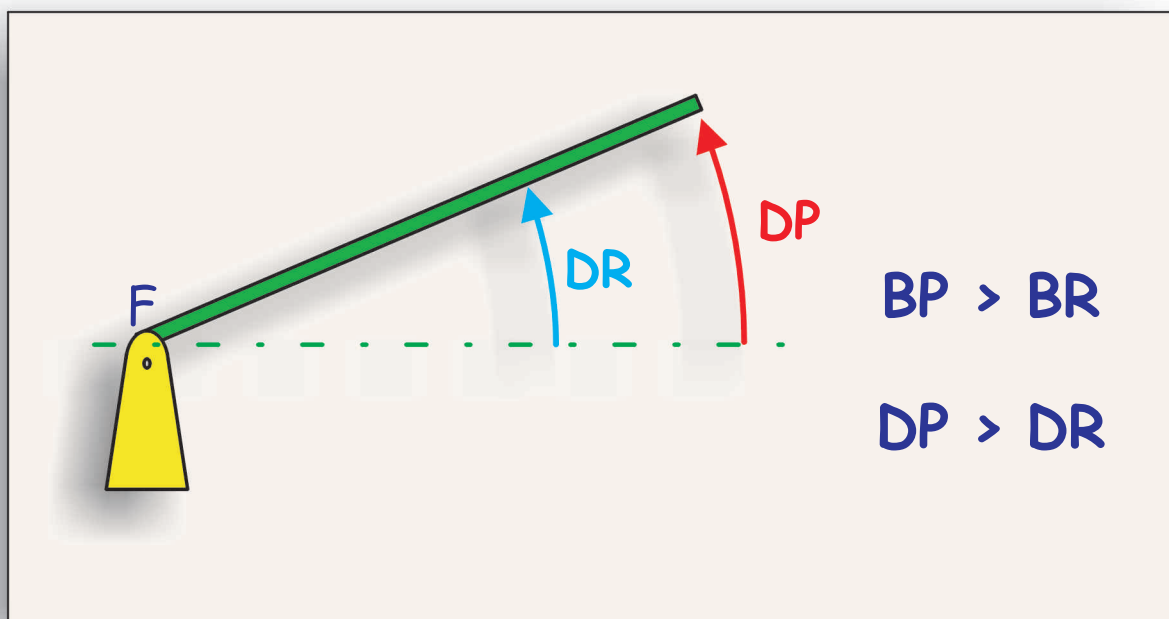


# PALANCA de 2º GRADO

## FUERZA

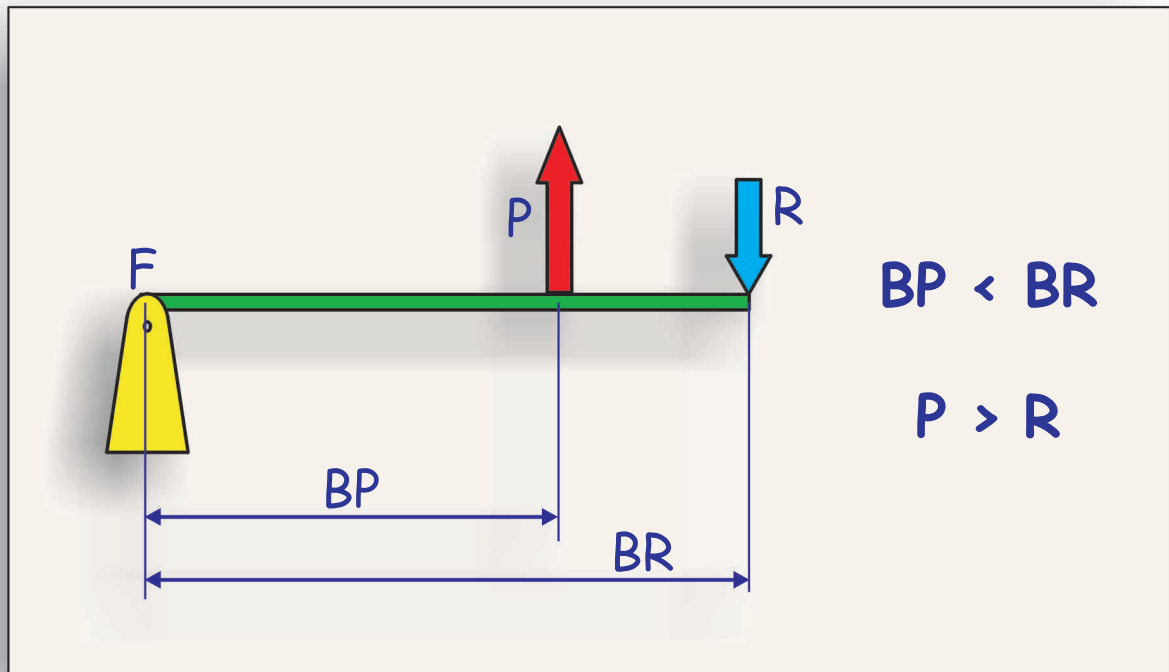


## MOVIMIENTO

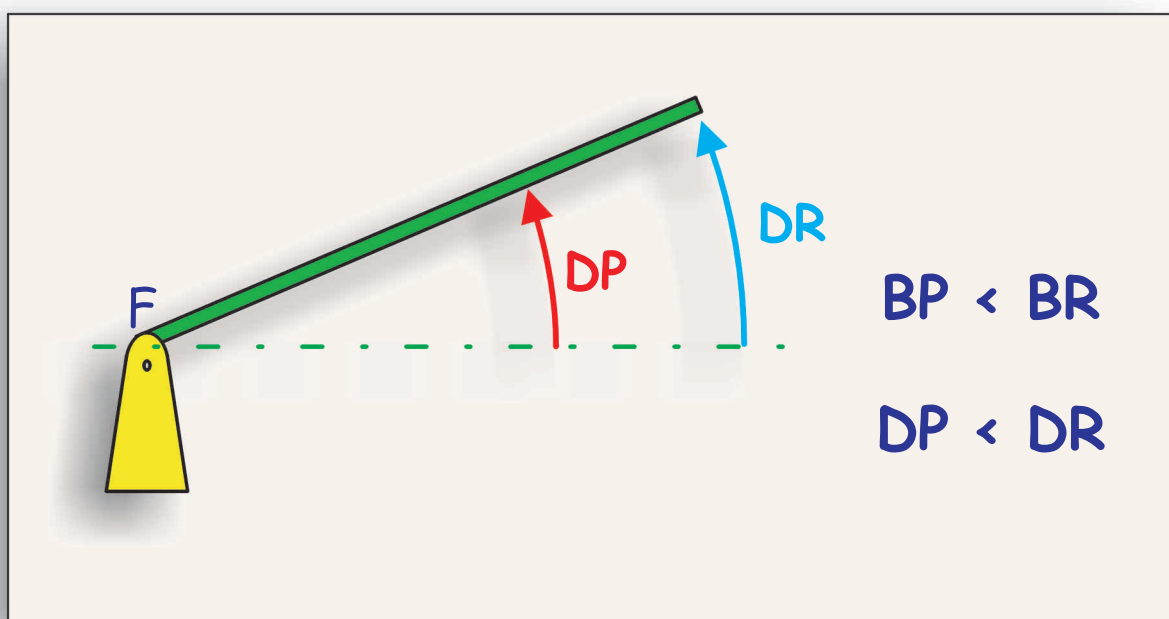


# PALANCA de 3<sup>er</sup> GRADO

## FUERZA

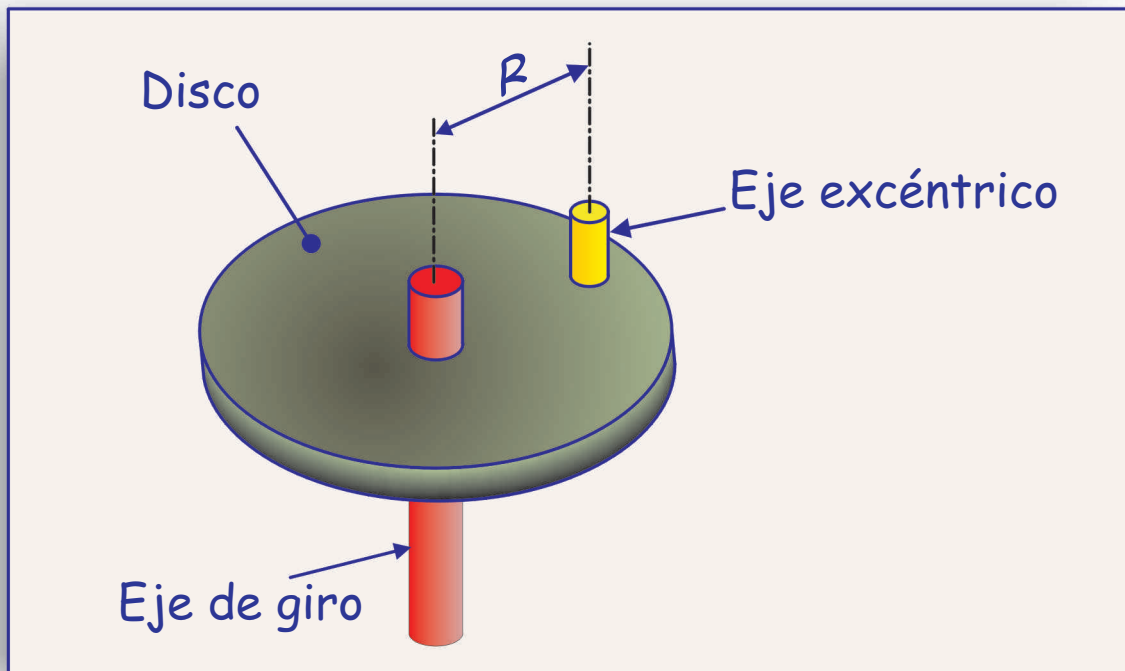


## MOVIMIENTO

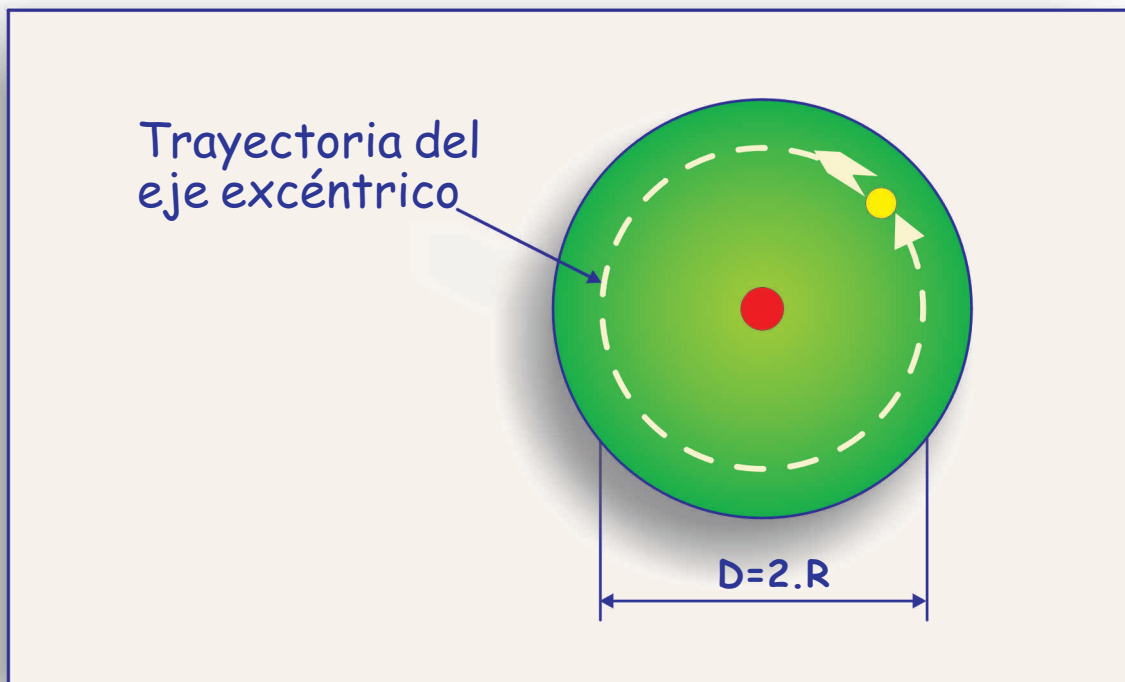


# EXCÉNTRICA

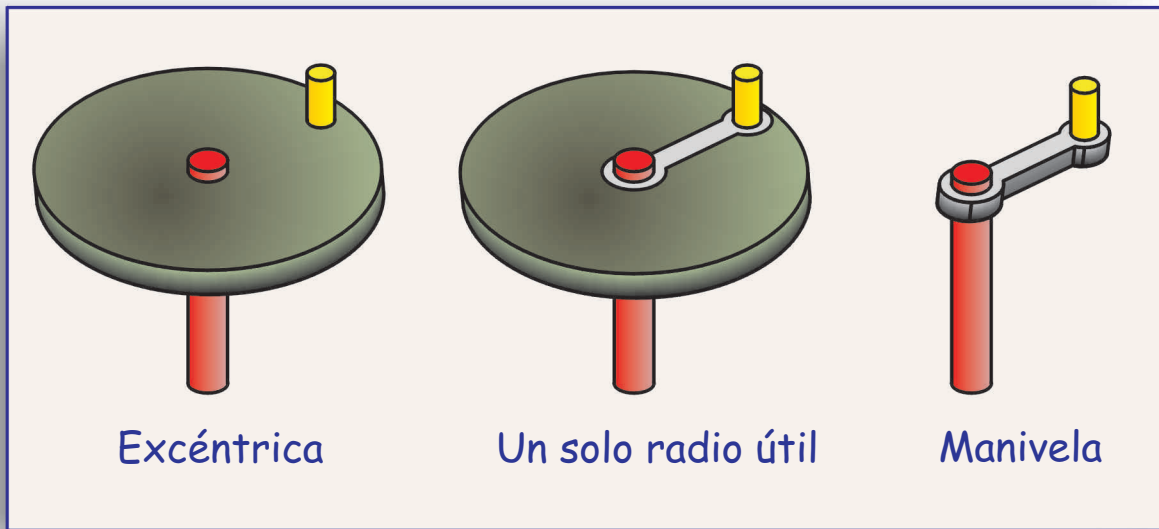
Disco con dos ejes: uno **excéntrico** y otro **centrado**



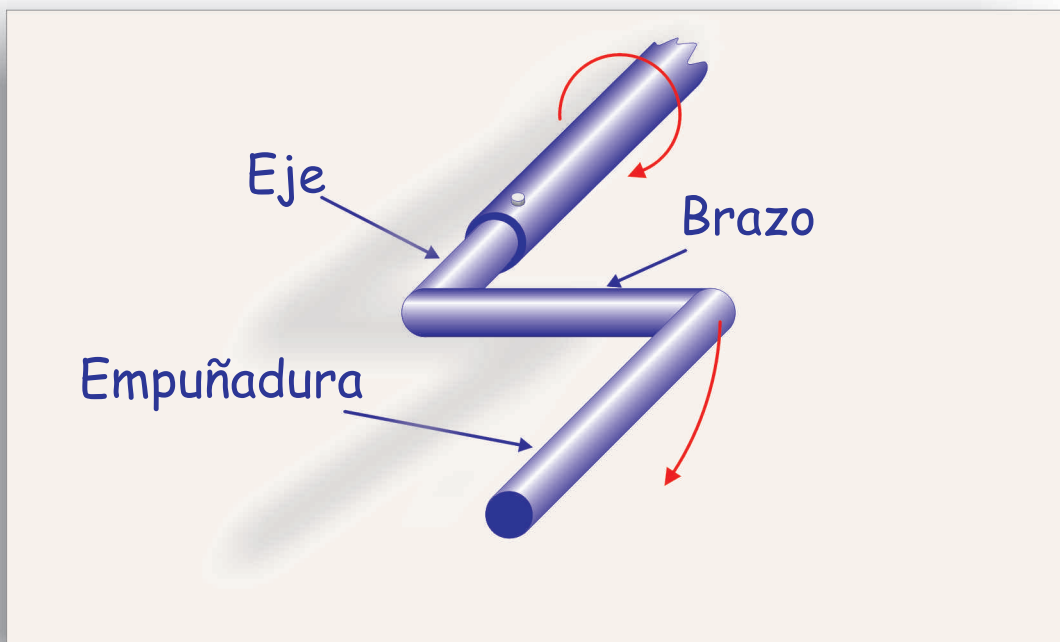
Al girar el disco sobre el **eje de giro**,  
el **eje excéntrico** describe una **circunferencia**



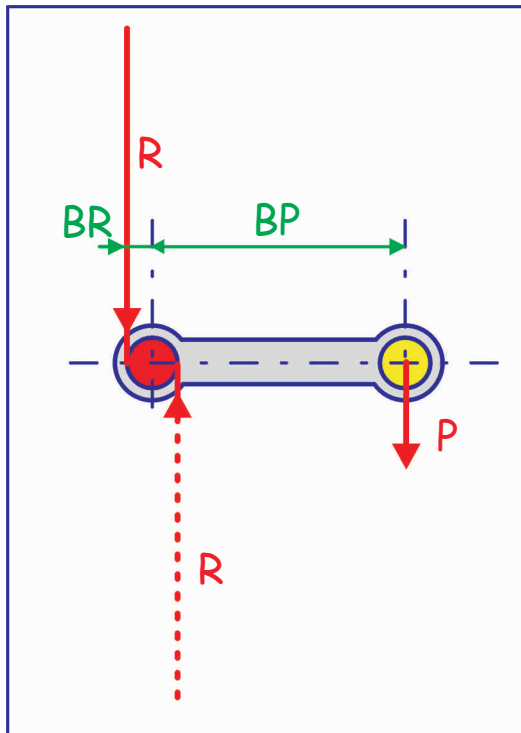
# MANIVELA



Tubo acodado que permite comunicar un movimiento giratorio a un eje empleando las manos



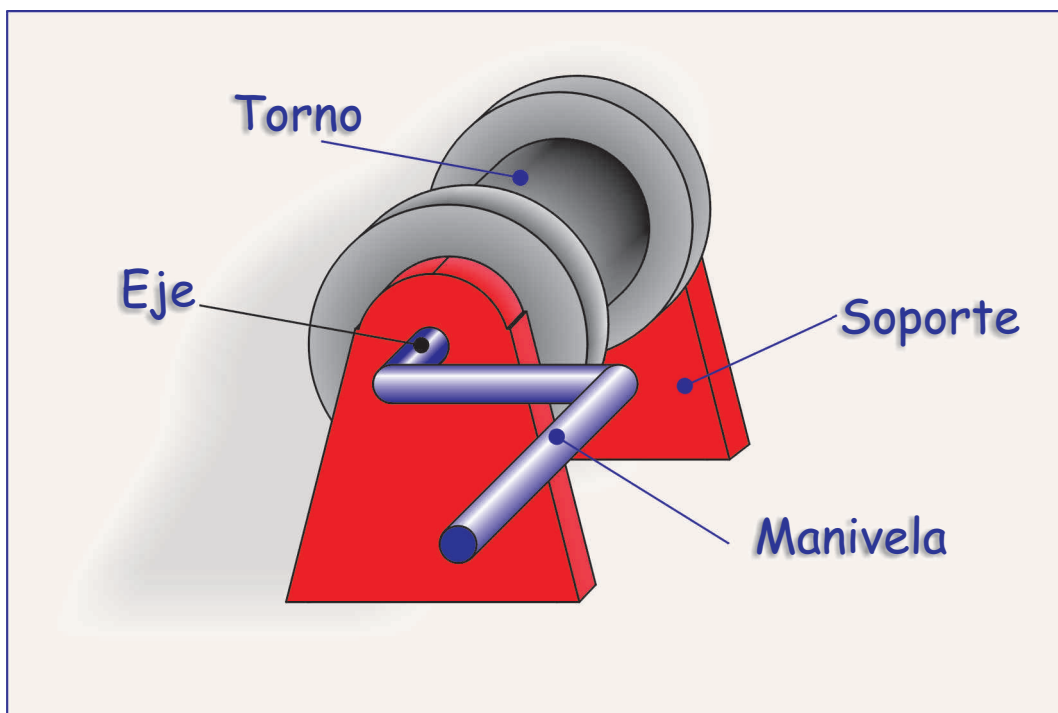
# MANIVELA



- P Potencia
- R Resistencia
- BP Brazo de potencia
- BR Brazo de resistencia

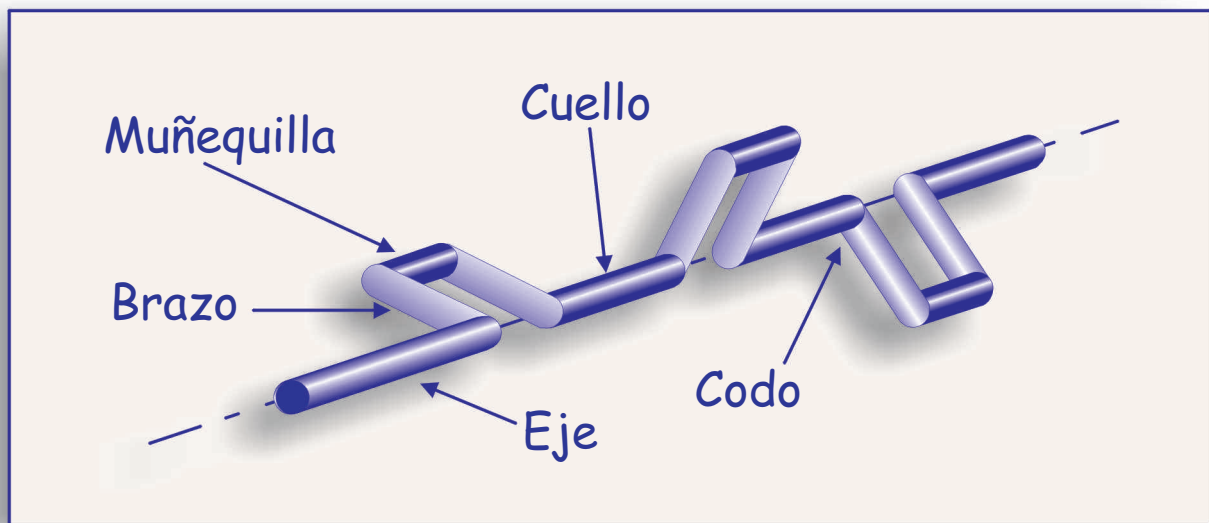
$$R \times BR = P \times BP$$

Como  $BP \gg BR$  tenemos  $R \gg P$

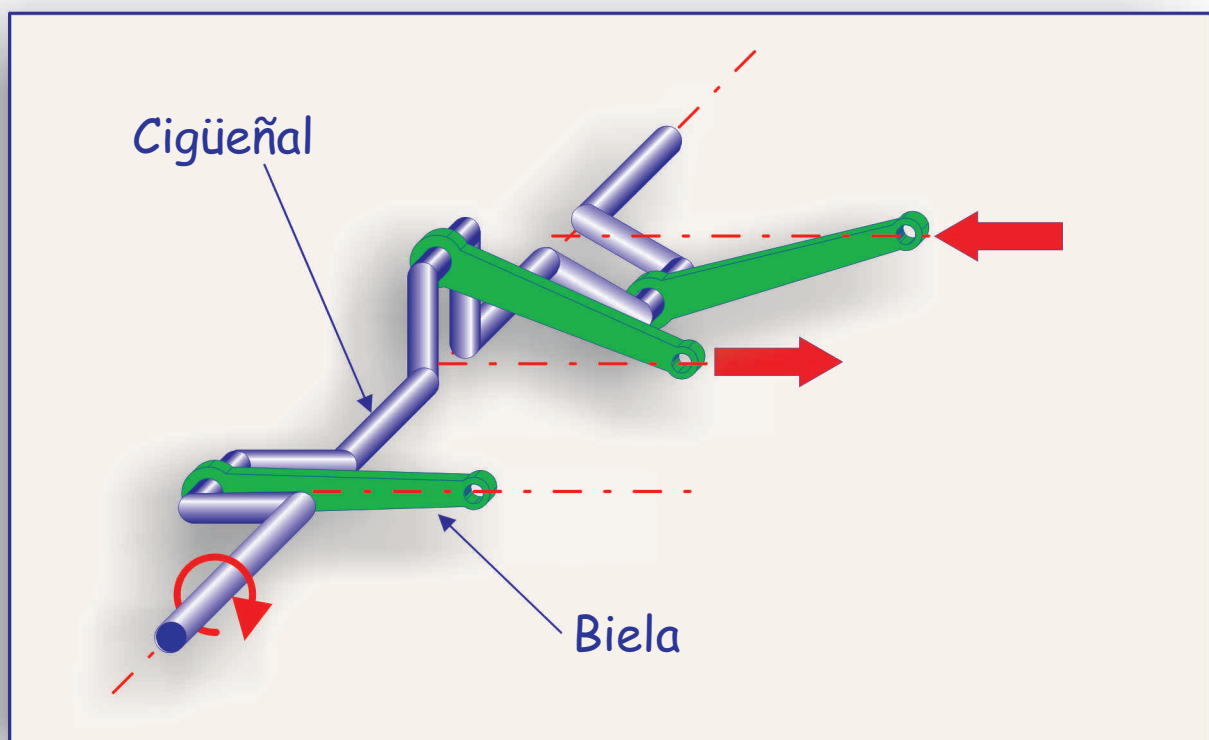




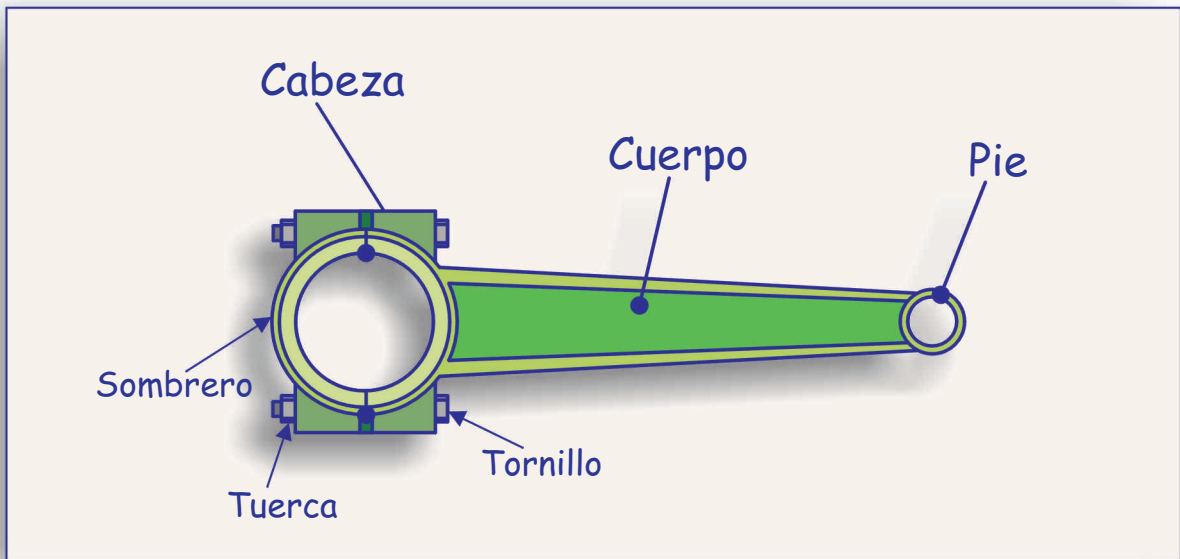
# CIGÜEÑAL



Conjunto de **manivelas** asociadas en serie sobre un único eje.

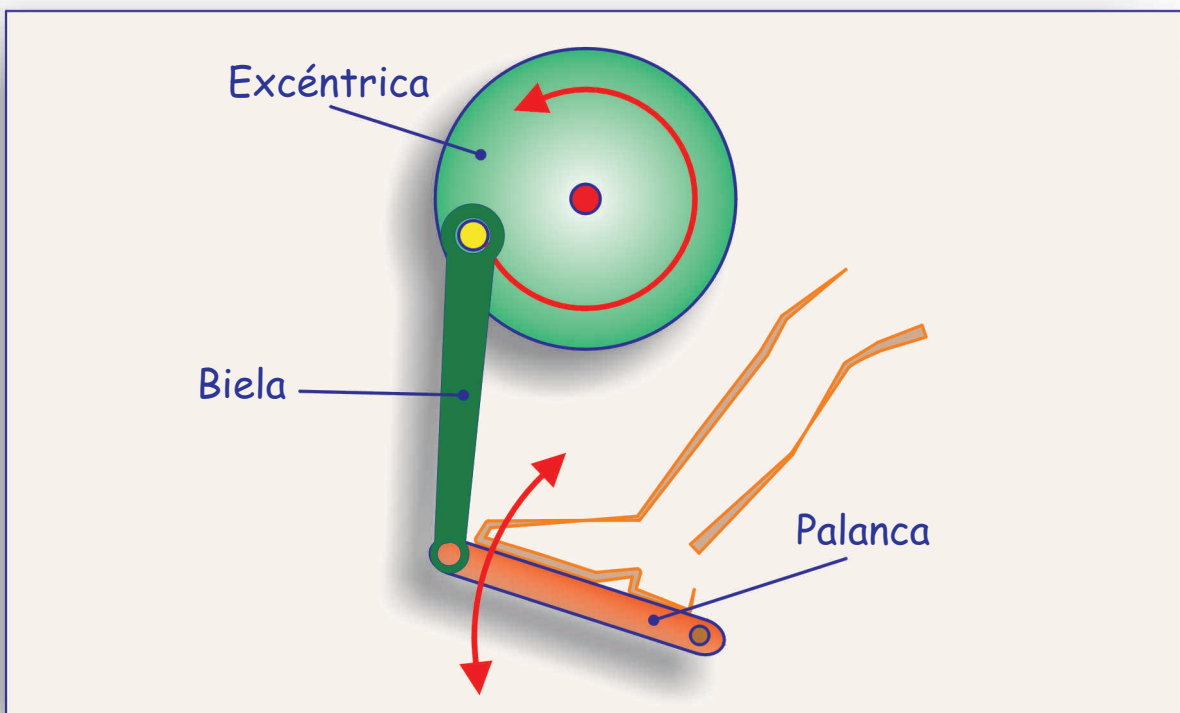


# BIELA

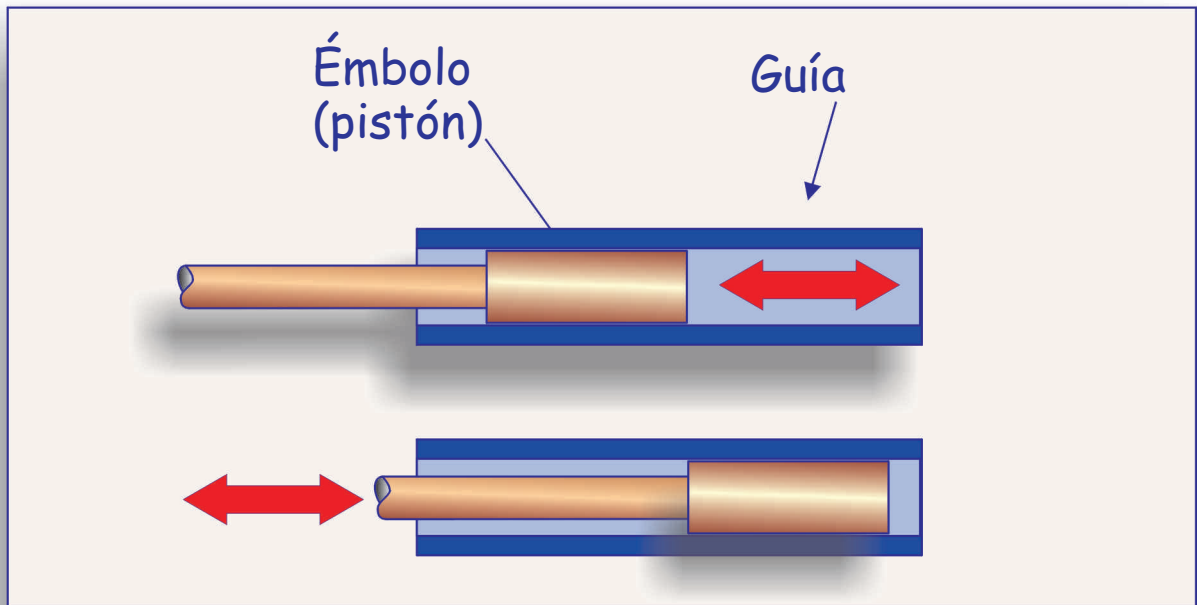


**Barra rígida preparada para uniones articuladas en los extremos.**

**Permite la conversión de movimiento giratorio en lineal alternativo, o viceversa**



## ÉMBOLO (pistón)



Barra que solo puede moverse en una dirección debido al empleo de guías.

