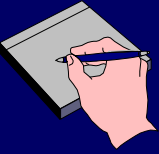
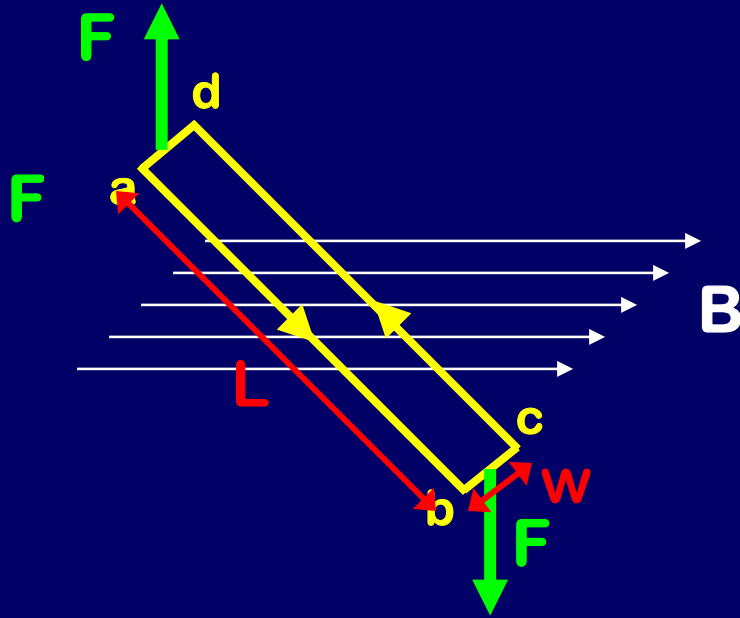


Torque on Current Loop

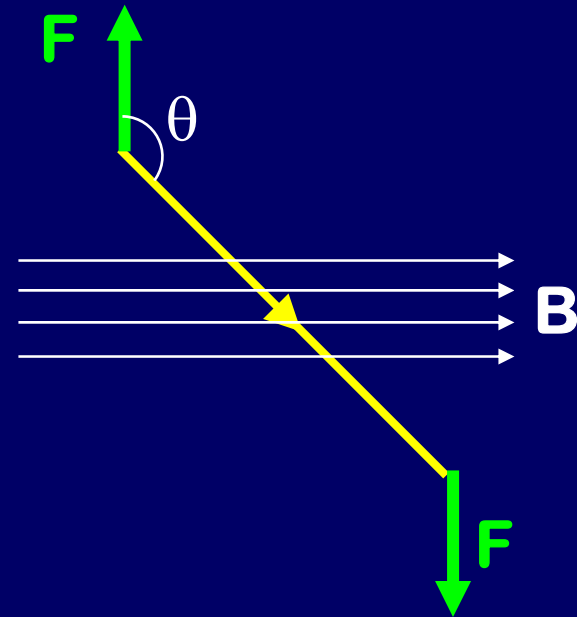


The loop will spin in place!



Recall from Phys 101:

$$\tau = FL \sin \theta$$



Force on sections b-c and a-d: $F = IBw$

Torque on loop is $\tau = L F \sin(\theta) = I \underbrace{Lw}_A B \sin(\theta)$
 $Lw = A!$

\therefore Torque is: $\tau = IAB \sin \theta$