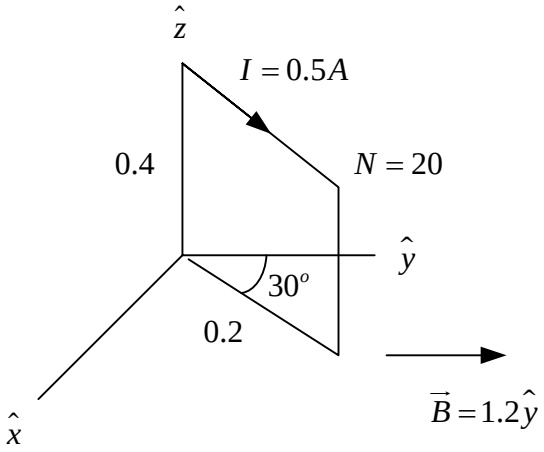
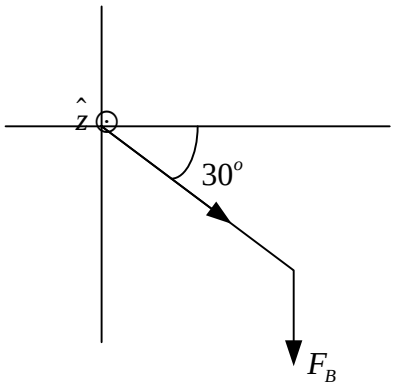
5-4





$\vec{F}_B = I\vec{l} \times \vec{B}$

on 1-loop:

$\vec{F}_b = (0.5)(0.4)(1.2)\hat{x} = 0.24\hat{x}(N)$

on 20-loop:

$\vec{F}_b = 4.8\hat{x}(N)$

$\vec{\tau} = \vec{r} \times \vec{F} = (0.2)(4.8)\sin 60^o(-\hat{z}) = -0.83\hat{z}(N\text{-}m)$