Special Problem 3-5.1

The current filaments below are located 10 meters apart. The current in each filament is 1 Amp, and the length of each filament is 0.01 meters.

Find (read this carefully!) the force exerted **by filament a on filament b.**

Filament **a**

I_a

x

y   z

30°

I_b Filament **b**