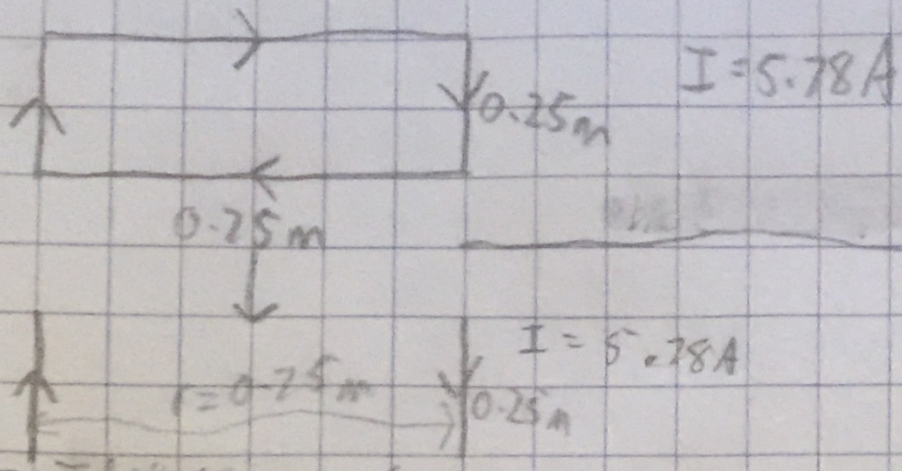
PSP 22 Alex Koch

$F = IlB$, $B = \frac{\mu_0 I}{2\pi r}$, $F = Il\frac{\mu_0 I}{2\pi r}$

$= Il \cdot I \cdot 4\pi e^{-7}/2\pi r$

$= I^2 l \cdot 2e^{-7}/r$

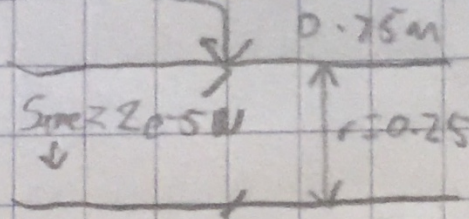


$F = I^2 l 2e^{-7}/r$

$= 5.78^2 \cdot 0.25 \cdot 2e^{-7}/0.75$

$= 2.23e{-6}\ N$

same = 2.23e-6N

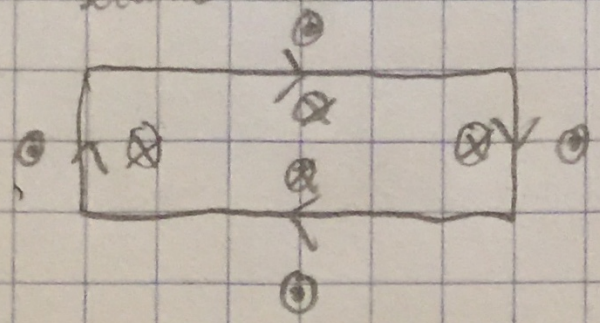


$F = Il2e^{-7}/r$

$= 5.78^2 \cdot .0075 \cdot 2e^{-7}/0.25$

$= 2.60e{-5}\ N$

because RHR #1



because RHR #2