

29.2.2 Direction of magnetic force



"External magnetic field" B^{ext} is along i .

Current I flows outward, along k .

Find direction of magnetic force based on intuitive reasoning.

	1	2	3	4
dir of mag force	$+i$	$-i$	$+j$	$-j$

Hint: Denote field due to I by B_1 .

- B_1 is counterclockwise,
- Compare fields: $B = B^{ext} + B_1$, at P_1 and P_2 .

