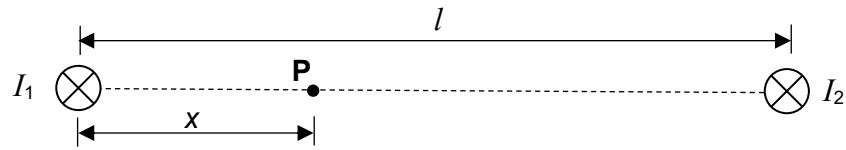


- 22** Two long parallel wires, separated by a distance l , carry currents I_1 and I_2 where $I_1 > I_2$ and both currents flow into the plane of the paper as shown in the diagram below.



What is the resultant magnetic field at point \mathbf{P} at distance x from the wire carrying current I_1 ?

	magnitude	direction
A	$\frac{\mu_0}{2\pi} \left(\frac{I_1}{x} - \frac{I_2}{l} \right)$	down
B	$\frac{\mu_0}{2\pi} \left(\frac{I_1}{x} - \frac{I_2}{l-x} \right)$	down
C	$\frac{\mu_0}{2\pi} \left(\frac{I_1}{x} - \frac{I_2}{l} \right)$	up
D	$\frac{\mu_0}{2\pi} \left(\frac{I_1}{x} - \frac{I_2}{l-x} \right)$	up