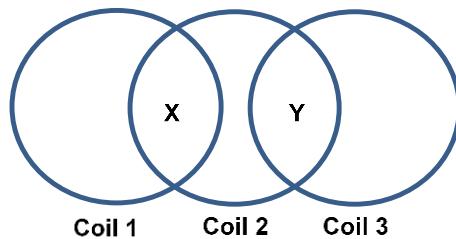


- 24** Three insulated coils of wires are placed on top of one another such that there are overlapping regions. Each of the coils carries identical current but their directions are unknown. Region X is found to have a resultant magnetic field pointing out of the paper while region Y is found to have a magnetic flux density of near zero.



Which of the following is a possible configuration of the direction of flow of the currents in the coils?

	Coil 1	Coil 2	Coil 3
A	clockwise	clockwise	counterclockwise
B	clockwise	counterclockwise	counterclockwise
C	counterclockwise	clockwise	clockwise
D	counterclockwise	counterclockwise	clockwise