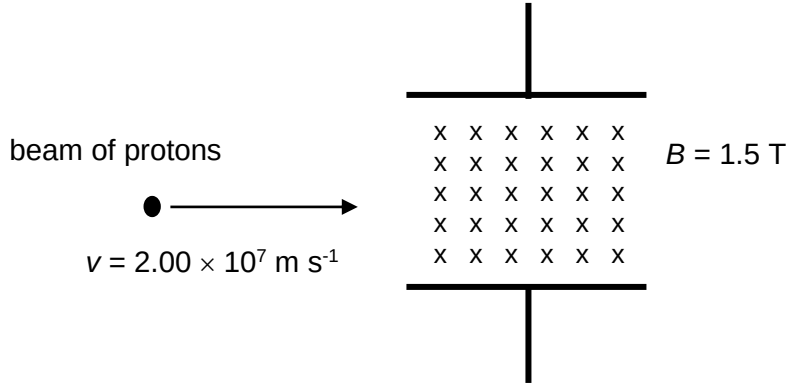
21 A beam of protons passes through a velocity selector. The magnetic flux density, B is 1.5 T and directed into the plane of paper.



If protons travelling at 2.00 x 10^7 m s^{-1} pass through the velocity selector undeflected, what is the direction and magnitude of the electric field applied?

	direction	magnitude
A	Towards upper plate	6.00 x 10^5 N C^{-1}
B	Towards lower plate	6.00 x 10^5 N C^{-1}
C	Towards upper plate	3.00 x 10^7 N C^{-1}
D	Towards lower plate	3.00 x 10^7 N C^{-1}