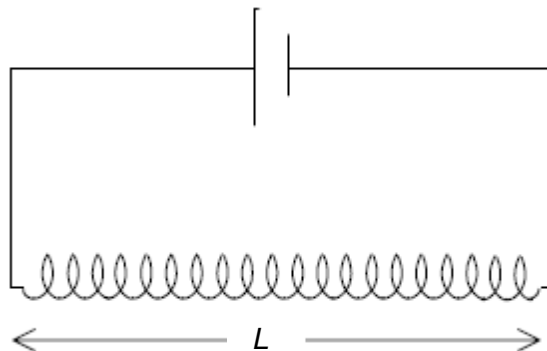
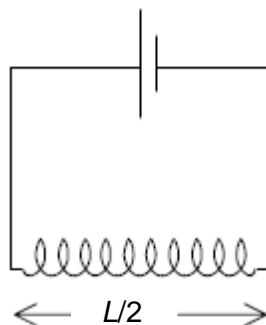


- 25** The diagram shows a long solenoid of length  $L$  connected to a battery of negligible internal resistance. The magnetic field strength at the centre of the solenoid is  $T$ .



The solenoid is now disconnected from the battery and cut in half and one of the halves is reconnected to the battery as shown below.



What is the best estimate of the field strength at the centre of this solenoid?

- A**  $0.25T$                       **B**  $0.5T$                       **C**  $T$                       **D**  $2T$