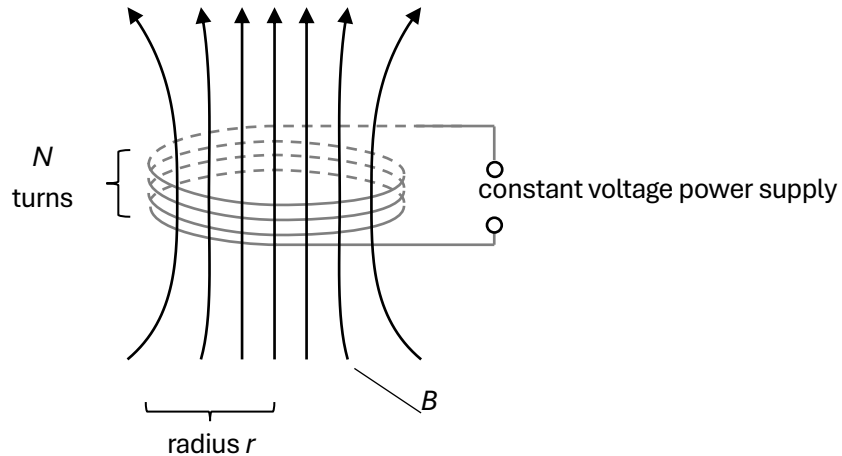


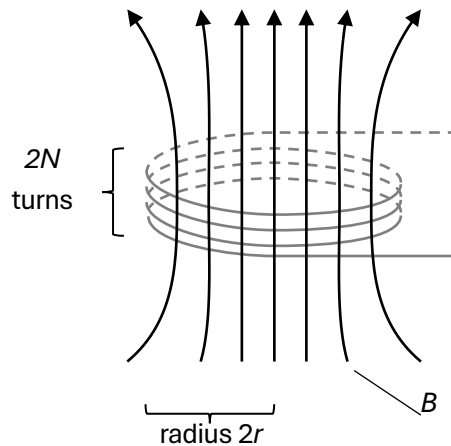
- 23** A flat circular coil with  $N$  number of turns and of radius  $r$  is connected to a constant voltage power supply. The diagram below is a visual representation of the magnetic flux density  $B$  generated when the power supply is switched on.

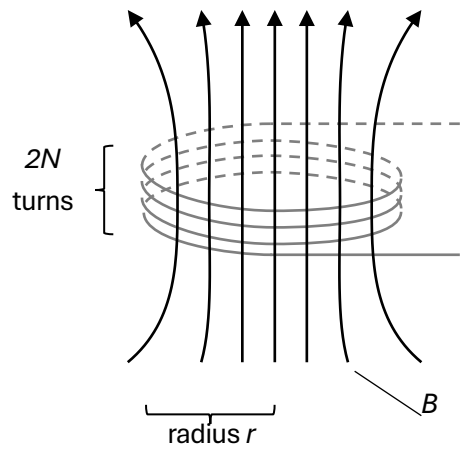


The flat circular coil is then replaced with another different number of turns and/or radius but made with the same type of wire. Which of the following representation of  $B$  is likely correct?

**A**

**B**





**C**  
**D**

