



Stop

Score

n/a

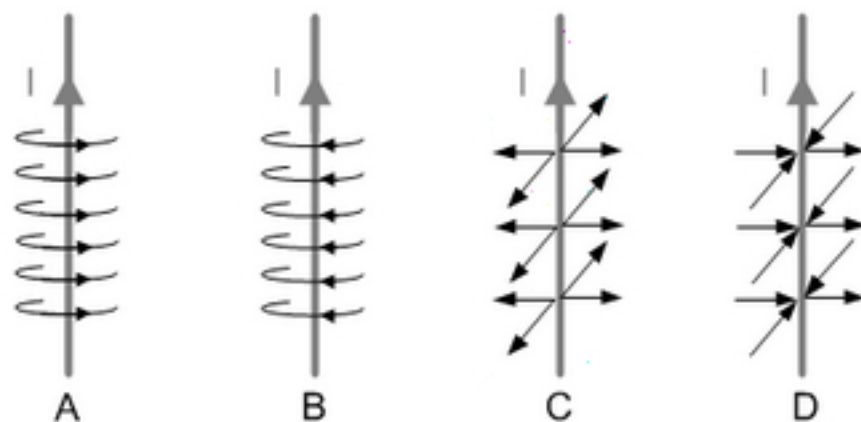
Questions

1

Repeats

No

Which of the following diagrams show the magnetic field pattern generated by a current-carrying wire?



Source

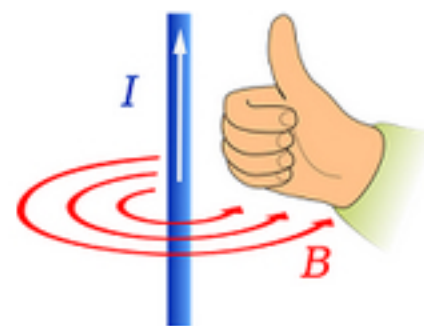
A	C	
B	B	
C	D	X
D	A	O
Show Next Question		

MAGNETIC FIELD OF A WIRE

A **long, straight** wire carrying **direct current** generates a **circular magnetic field** around the wire.

The **right hand grip rule** gives the direction of the magnetic field along the wire:

- Point the thumb of your right hand in the direction of the **conventional** current and curl your fingers up as shown.
- The magnetic field lines are **circles** around the wire pointing in the same direction as your fingers.



The direction of the magnetic field of a long, straight, current-carrying wire can be deduced using the right hand grip rule. [Source](#)

Increasing the current in the wire increases the strength of the magnetic field.

Reversing the direction of the current in the wire reverses the direction of the magnetic field.