

Answer on Question #46217, Physics, Electromagnetism

Task:

If the steady current in a wire is coming directly toward you, the magnetic field lines.

- a)point radially outward
- b)radially inward
- c)circle the wire in the clockwise direction
- d)circle the wire in the counter clockwise direction

Answer:

The Maxwell's right handed cork screw rule or right hand palm rule can be used to find direction of magnetic field due to current in a conductor .Rotate the cork screw towards yourself such that screw moves towards you, then outstretched thumb rotation is anticlockwise. The magnetic field lines will circle the wire in the anticlockwise direction, that's why answer **d)circle the wire in the counter clockwise direction.**