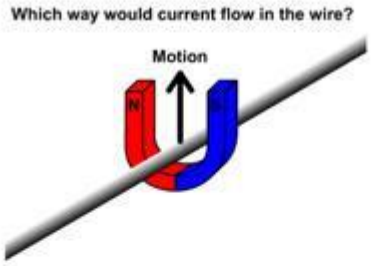
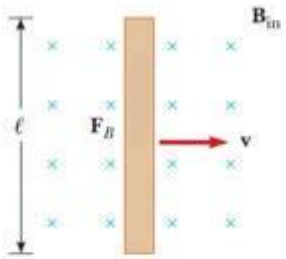
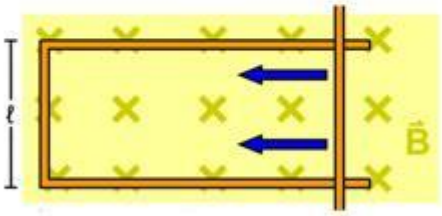


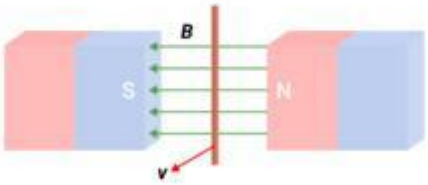

Direction of current:



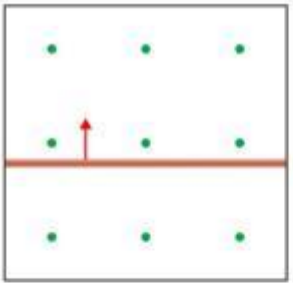

Direction of current:




Direction of current:




Direction of current:



EMF = 1.5V
R = 0.75Ω

Direction of current:

Magnitude of current:

| | |
|---|---|
| $B$ | $7.5 \times 10^{-2}$ T |
| $L$ | 0.25 m |
| $v$ | 4.5 m/s |
| $\theta$ | 90° |
| $EMF$ | ? |

EMF =

A magnet with a field strength of 2.5 mT is moved perpendicular to a 75 cm coil of wire at a speed of 3.5 m/s. Assume that the field is uniform and moving perpendicular to the wire. The induced EMF in the wire is:

If the maximum current of a water kettle is 1.2 A. Then the value of the effective current of the kettle is equal to: