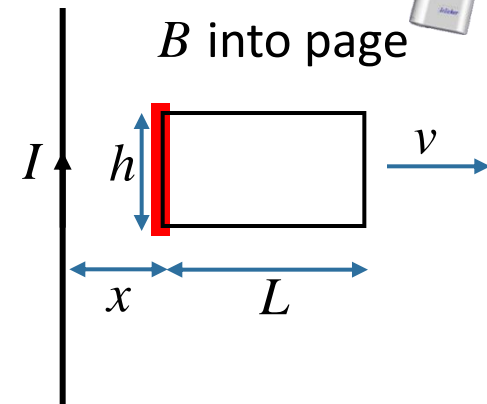


# Example Problem

A rectangular loop ( $h = 0.3\text{ m}$   $L = 1.2\text{ m}$ ) with total resistance of  $5\Omega$  is moving away from a long straight wire carrying total current  $8\text{ amps}$ . What is the induced current in the loop when it is a distance  $x = 0.7\text{ m}$  from the wire?



What is the *emf* induced on the left segment?

- A) Top is positive
- B) Top is negative
- C) Zero

$$\vec{v} \times \vec{B} \uparrow$$