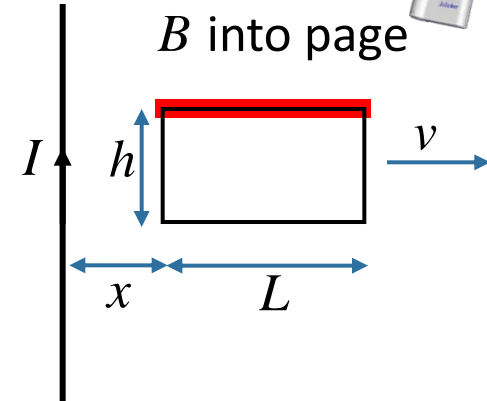


Example Problem

A rectangular loop ($h = 0.3\text{ m}$ $L = 1.2\text{ m}$) with total resistance of 5Ω is moving away from a long straight wire carrying total current 8 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 top segment?

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

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

perpendicular to wire