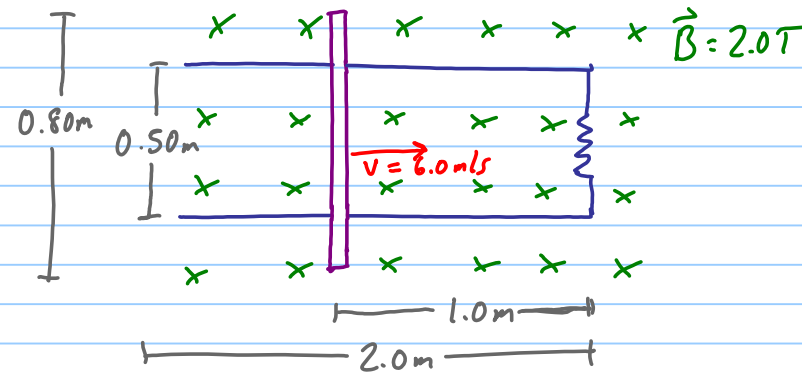
Quiz 5 a

Note Title 29/05/2011

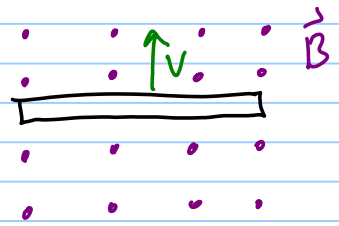
1) A conducting rod is placed in a circuit as shown. The conductor is pulled at 6.0 m/s perpendicular to a magnetic field of 2.0 T. The circuit has a resistance of 12 Ω.

a. How much current flows?

b. What is the direction of the current?



2.)



A conductor moves ⊥ to a magnetic field as shown. Which end will become positive?

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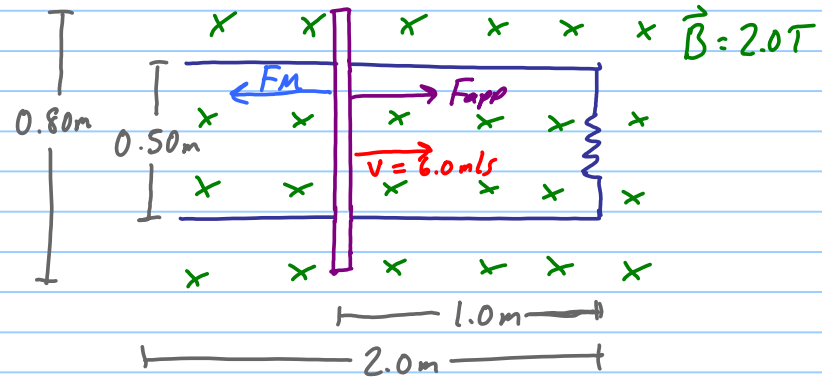


a. $\mathcal{E} = B l v$ ✓

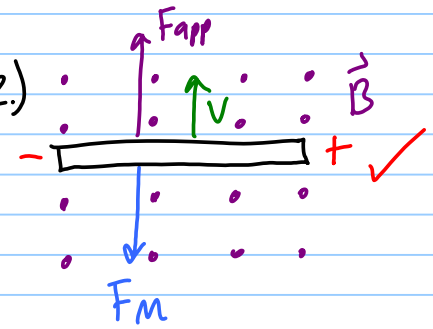
$= (2.0T)(0.50\,m)(6.0\,m/s)$

$= 6.0V$ ✓

$\mathcal{E} = IR \qquad I = \frac{\mathcal{E}}{R} = \frac{6.0V}{12\,\Omega} = 0.50\,A$ ✓

b. clockwise ✓

2.)



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