



$$l = 1.2 \text{ m}$$

$$B = 2.5 \text{ T}$$

$$I = 0.5 \text{ A}$$

$$\mathcal{E} = IR \qquad \mathcal{E} = Blv$$

$$IR = Blv$$

$$v = \frac{IR}{Bl} = \frac{0.5(6)}{2.5(1.2)} = 1 \frac{\text{m}}{\text{s}}$$

19) $l = 60 \text{ m}$, $v = 300 \frac{\text{m}}{\text{s}}$, $B = 50 \mu\text{T}$

$$\mathcal{E} = Blv \sin\theta$$

$$= 50 \times 10^{-6} \sin 58^\circ (60) (300)$$

$$= 0.763 \text{ V}$$

