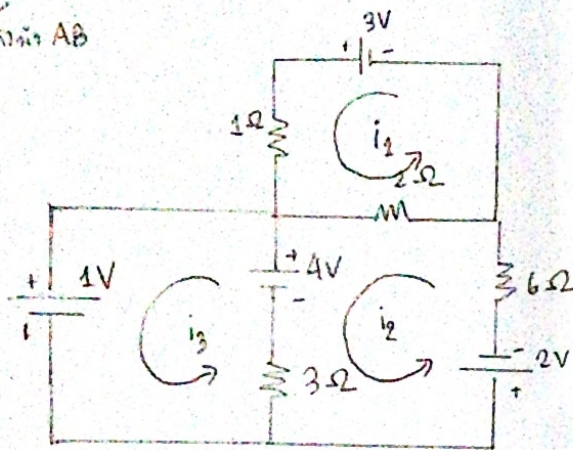


$$\Delta V = \lambda v B \sin \theta$$

$$\Delta V = (0.1)(20)\left(\frac{1}{2}\right) \sin 90^\circ$$

$$\Delta V = 1 \text{ V}$$

← กระแสที่ AB



$$\text{Loop } i_1 ; \quad -3 + 1(i_1) + 2(i_1 - i_2) = 0 \rightarrow 3i_1 - 2i_2 = 3 \quad (1)$$

$$\text{Loop } i_2 ; \quad 4 + 3(i_2 - i_3) + 2 + 6i_2 = 0 \rightarrow 9i_2 - 3i_3 = -6 \quad (2)$$

$$\text{Loop } i_3 ; \quad 1 + 3(i_3 - i_2) - 4 = 0 \rightarrow -3i_2 + 3i_3 = 3 \quad (3)$$

$$\text{แก้สมการได้ } i_1 = \frac{2}{3} = 0.67 \text{ A } i_2 = -\frac{1}{2} = -0.5 \text{ A } i_3 = \frac{1}{2} = 0.5 \text{ A}$$

$$\therefore \text{ กระแสไหลผ่าน } 2 \Omega = i_2 + i_1 = 0.67 + 0.5 = 1.17 \text{ A}$$