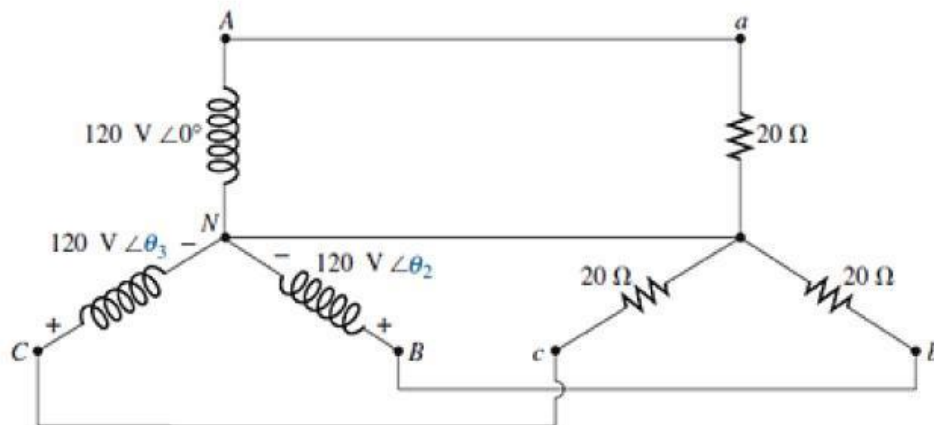


แบบฝึกหัดที่ 29	เรื่อง 3 phase YY(2)	
รหัส 30104-1003	วิชา วงจรไฟฟ้า 2	
ชื่อ-สกุล	ชั้น	เลขที่

1. The phase sequence for the Y-Y system in Fig. is ABC.
- Find the angles θ_2 and θ_3 for the specified phase sequence.
 - Find the voltage across each phase impedance in phasor form.
 - Find the current through each phase impedance in phasor form.
 - Find the magnitude of the line voltages.
 - Find the magnitude of the line currents.



วิธีทำ

a. หา θ_2, θ_3

$$\theta_2 = \theta_{\boxed{}}^{\boxed{}}^{\circ} = \boxed{}^{\circ} \boxed{}^{\circ}$$

$$= \boxed{}^{\circ} \quad \text{Ans.}$$

$$\theta_3 = \theta_{\boxed{}}^{\boxed{}}^{\circ} = \boxed{}^{\circ} \boxed{}^{\circ}$$

$$= \boxed{}^{\circ} \quad \text{Ans.}$$

b. หาแรงดันที่โหลดทุกเฟส จากรูป จะได้ว่า

$$V_{an} = V_{\boxed{}} = \boxed{} \angle \boxed{}^{\circ} \boxed{} \quad \text{Ans.}$$

$$V_{bn} = V_{\boxed{}} = \boxed{} \angle \boxed{}^{\circ} \boxed{} \quad \text{Ans.}$$

$$V_{cn} = V_{\boxed{}} = \boxed{} \angle \boxed{}^{\circ} \boxed{} \quad \text{Ans.}$$

c. หาคะแสที่ไหลจากสูตร

$$I_{an} = \boxed{} \angle \boxed{}^\circ Z_L = \boxed{} \angle \boxed{}^\circ \boxed{} \angle \boxed{}^\circ$$

$$= \boxed{} \angle \boxed{}^\circ \boxed{} \text{ } \underline{\text{Ans.}}$$

$$I_{bn} = \boxed{} \angle \boxed{}^\circ$$

$$= \boxed{} \angle (\boxed{} \angle \boxed{}^\circ \boxed{})^\circ$$

$$= \boxed{} \angle \boxed{}^\circ \boxed{} \text{ } \underline{\text{Ans.}}$$

$$I_{cn} = \boxed{} \angle \boxed{}^\circ$$

$$= \boxed{} \angle (\boxed{} \angle \boxed{}^\circ \boxed{})^\circ$$

$$= \boxed{} \angle \boxed{}^\circ \boxed{} \text{ } \underline{\text{Ans.}}$$

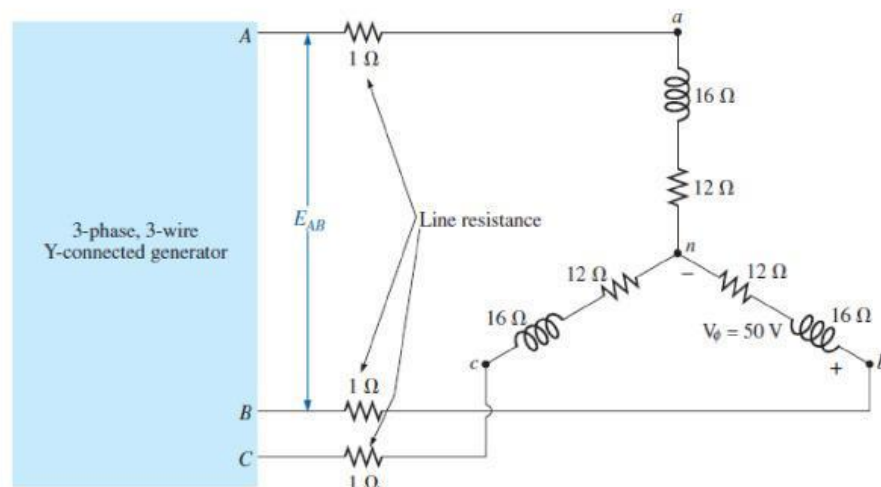
d. หาขนาดแรงดันที่สายจากสูตร

$$V_L = \boxed{} V_P = \boxed{} \angle \boxed{}^\circ \boxed{} = \boxed{} \angle \boxed{}^\circ \text{ } \underline{\text{Ans.}}$$

e. หาขนาดกระแสที่สายจากสูตร

$$I_L = I_P = I_{\boxed{}} = I_{\boxed{}} = I_{\boxed{}} = \boxed{} \angle \boxed{}^\circ \text{ } \underline{\text{Ans.}}$$

- 2. Compute the magnitude of the voltage E_{AB} for the balanced three-phase system in Fig.**



วิธีทำ หาขนาดกระแสที่สายจากสูตร

โจทย์ให้ $V_\theta = \boxed{} \boxed{} = V_{Load}$

$Z_\theta = \boxed{} \boxed{} \boxed{} = \boxed{} \angle \boxed{}^\circ \boxed{} = Z_{Load}$

ดังนั้น $I_P = \boxed{} \boxed{} \boxed{} = \boxed{} \boxed{} \boxed{} = \boxed{} \boxed{}$

$Z_T = Z_{Line} \boxed{} \boxed{} = \boxed{} \boxed{} \boxed{} \boxed{} \boxed{}$
 $= \boxed{} \boxed{} \boxed{} = \boxed{} \angle \boxed{}^\circ \boxed{}$

$V_P = I_P \boxed{} \boxed{} = \boxed{} \boxed{} \boxed{} = \boxed{} \boxed{}$

ดังนั้น $E_{AB} = V_L = \boxed{} \boxed{} \boxed{} = \boxed{} \boxed{} \boxed{}$
 $= \boxed{} \boxed{} \text{ Ans. }$