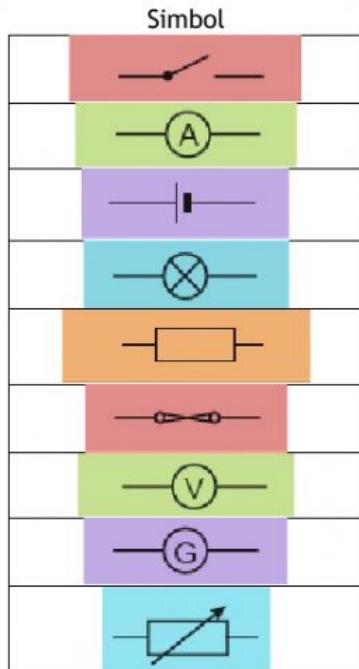


Latihan Pengukuran Arus, Voltan dan Rintangan bagi Litar Bersiri dan Litar Selari

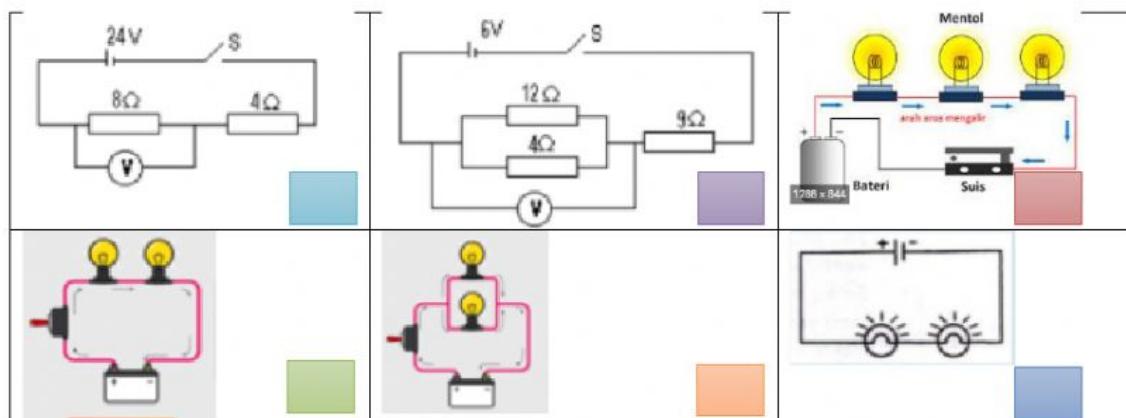
(Sains Tingkatan 2 - Subtopik 7.2)

1. Labelkan simbol komponen elektrik di bawah.

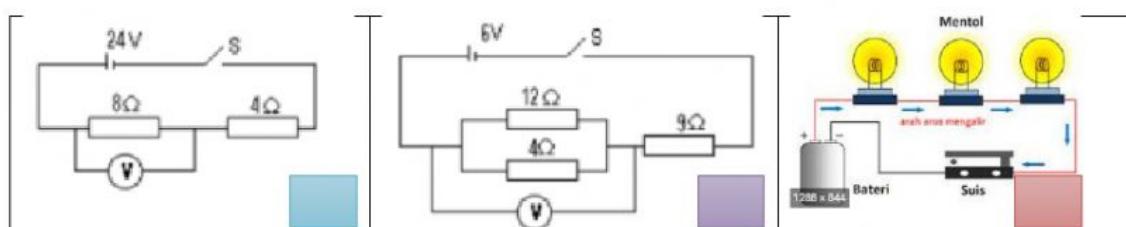


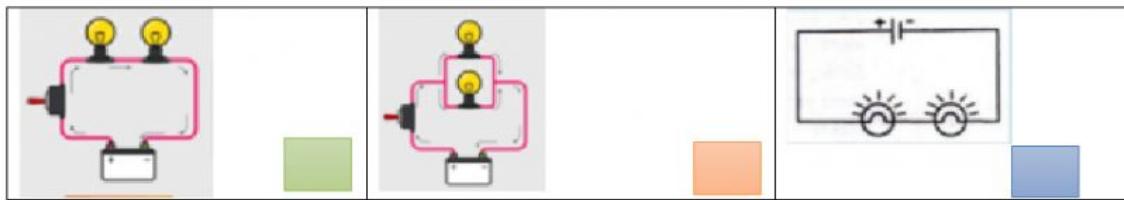
Komponen elektrik
Perintang
Fius
Suis
Ammeter
Voltmeter
Galvanometer
Mentol
Perintang boleh laras
Bateri

2. Tandakan (✓) pada litar selari.

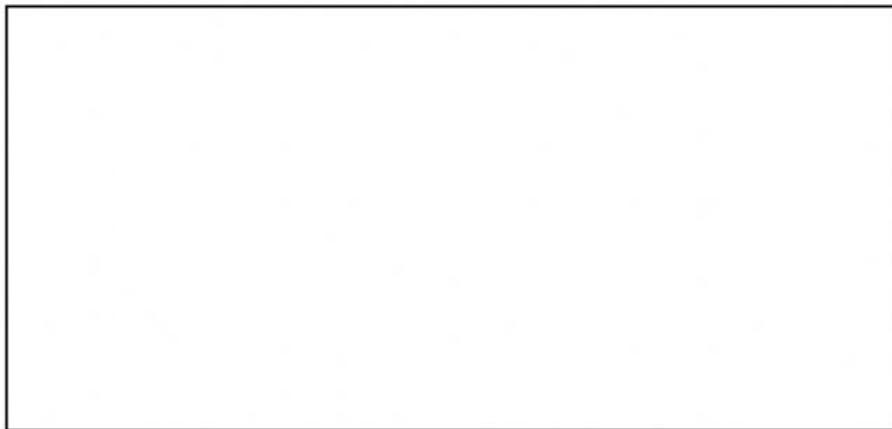


3. Tandakan (✓) pada litar bersiri.

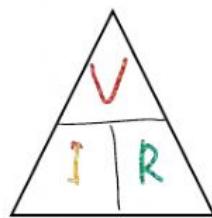
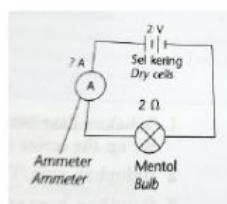




4. Tonton video di bawah dan jawab semua soalan.



a) Hitung nilai arus dalam litar ini.

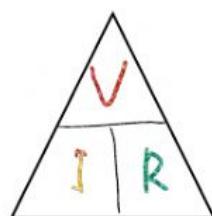
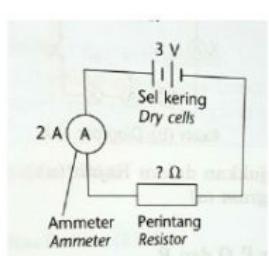


$$V = \boxed{\text{Sel kering}}$$

$$R = \boxed{\text{Mental Bulb}}$$

$$I = \frac{V}{R} = \frac{\boxed{2V}}{\boxed{2\Omega}} = \boxed{1A}$$

b) Hitung nilai rintangan dalam litar ini.

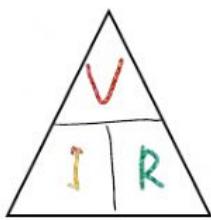
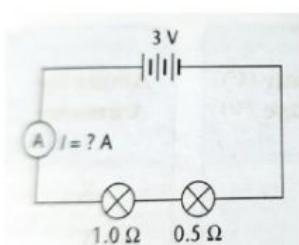


$$V = \boxed{\text{Sel kering}}$$

$$I = \boxed{2A}$$

$$R = \frac{V}{I} = \frac{\boxed{3V}}{\boxed{2A}} = \boxed{1.5\Omega}$$

c) Hitung nilai rintangan dalam litar ini.



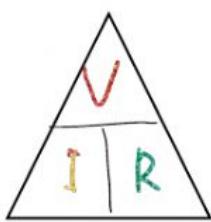
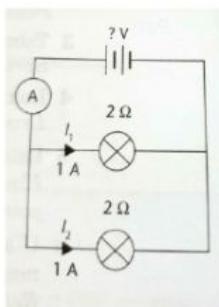
$$V = \boxed{\text{color bars}} V$$

$$R = \boxed{\text{color bars}} \Omega$$

$$I = \frac{V}{R} = \frac{\boxed{\text{color bars}}}{\boxed{\text{color bars}}} = \boxed{\text{color bars}} A$$

$$R = R_1 + R_2 = \boxed{\text{color bars}} + \boxed{\text{color bars}} = \boxed{\text{color bars}} \Omega$$

d) Hitung nilai rintangan dalam litar ini.



$$I = \boxed{\text{color bars}} A$$

$$R = \boxed{\text{color bars}} \Omega$$

$$V = I \times R = \boxed{\text{color bars}} \times \boxed{\text{color bars}} = \boxed{\text{color bars}} V$$

$$\frac{1}{R} = \frac{1}{R_1} + \frac{1}{R_2} = \frac{1}{\boxed{\text{color bars}}} + \frac{1}{\boxed{\text{color bars}}} = \frac{1}{\boxed{\text{color bars}}}$$

$$R = \boxed{\text{color bars}} \Omega$$