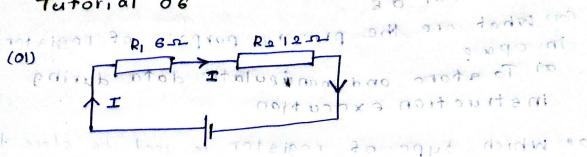
30 10 17 of w



$$V = TR$$

$$R = R_1 + R_2 = 12 \Omega + 6 \Omega = 18 \Omega$$

$$V = TR$$

$$R = V = 1A \times 18 \Omega$$

$$= 18 V$$

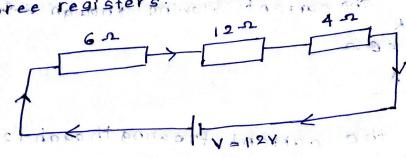
c) 20 to 64 lits TR1 = 6-2 out they do registers 100 Ray 12 12 (a) Ag ininimizing letency.

$$\frac{1}{R} = \frac{1201}{R_1} + \frac{120}{R_2} = \frac{21}{6} + \frac{11}{12} = \frac{21}{12} + \frac{3}{12} = \frac{3}{12}$$

$$= R = 4\frac{21}{12} + \frac{11}{12} = \frac{21}{12} + \frac{11}{12} = \frac{3}{12} = \frac$$

(02) Three registers 62 12 2 and 4 2 are connected in series to an electronic supply of 12 V.

(i) Calculate the total resistance of these three registers.



$$R = R_1 + R_2 + R_3$$

$$= 6 + 12 + 4 = 2^{2} + \frac{1}{2}$$

(ii) calculate the current,

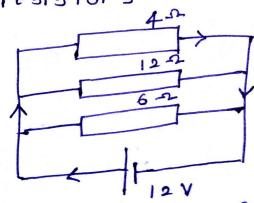
$$V = IR$$

$$V = IR$$

$$I = V = \frac{12V}{22-7} = 0.54A$$

(03) Phree registors 4-2,12-2 and 6-2 are connected to a supply of 12 V as shown below. 1) Calculate the total resistance of these

three resistors



$$\frac{1}{R} = \frac{1}{4} + \frac{1}{12} + \frac{1}{6} = \frac{3+1+2}{12} = \frac{6}{12} = \frac{1}{2}$$

(i) What current is gained from the electric Supply : 2017 100 04 201100 01 Both entry of they

$$V = IR$$

$$I = \frac{V}{R} = \frac{12}{2} = \frac{6A}{R}$$

(iii) Calculate the current flowing shough 6-2

$$Y = I R$$

$$19 = I \times G \Lambda$$

$$I = 2 \Lambda$$

(iv) What is the current flowing though 12-12?

$$V = IR$$

$$I = \frac{V}{R} = \frac{12V}{19R} = \frac{1}{19R} + \frac{1}{19R} = \frac{1}{19R} = \frac{1}{19R} + \frac{1}{19R} = \frac{1$$

(v) What is the current flowing through 42?

$$V = IR$$

$$I = V/R = \frac{12V}{4-9} = \frac{3A}{4}$$

hat is the current of  $\mathbb{Z}$  and  $\mathbb{Z}$ connected to a supply of 124 as shown below eatendere total registance of these

that c resistors