For series resistors } THE TOTAL EFFECTIVE RESISTANCE = SUM of INDIVIDUAL RESISTANCES

$R_e \rightarrow R_T = R_1 + R_2 + R_3 \cdots$

$R_T = 2\Omega + 3\Omega = 5\Omega$

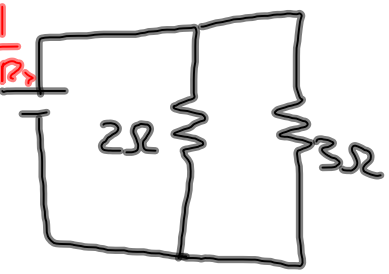
$V = IR \quad I = \frac{V}{R}$

for parallel arrangement of resistors

$\frac{1}{R_T} = \frac{1}{R_1} + \frac{1}{R_2}$

$\frac{1}{R_1}$ $\frac{R_2}{R_1 R_2}$

$\frac{1}{R_2}$ $\frac{R_1}{R_1 R_2}$



$\frac{1}{R_T} = \frac{1}{R_1} + \frac{1}{R_2} + \frac{1}{R_3}$

$\frac{1}{R_T} = \left[\frac{1}{2} + \frac{1}{3}\right] = 0.8333$

$R_T = 1.2\Omega$ $\frac{1}{2}$ $\frac{3}{(2)(3)}$ $\frac{3+2}{(2)(3)}$

$\frac{1}{3}$ $\frac{2}{(2)(3)}$

$R_T = \left[\frac{1}{\frac{1}{R_1} + \frac{1}{R_2}}\right]$

$\frac{1}{R_T} = \frac{1}{R_1} + \frac{1}{R_2}$

$R_T =$

$\frac{1}{R_1}$ $\frac{R_2}{R_1 R_2}$

$+$

$\frac{1}{R_2}$ $\frac{R_1}{R_1 R_2}$

$\frac{1}{R_T} = \frac{R_1 + R_2}{R_1 R_2}$

$R_T = \frac{R_1 R_2}{R_1 + R_2}$

$\frac{1}{R_T} = \frac{1}{R_1} + \frac{1}{R_2} + \frac{1}{R_3}$

$R_T = ?$