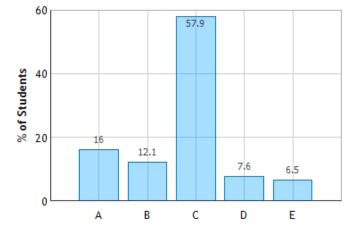




Resistor Network: Question 5 (N = 820)



CheckPoint 2d

Compare the voltage across R_1 with the voltage across R_2

B
$$V_1 = \frac{1}{2} V_2 = V$$

$$V_1 = 2V_2 = V$$

D
$$V_1 = \frac{1}{2} V_2 = \frac{1}{5} V$$

$$V_1 = \frac{1}{2} V_2 = \frac{1}{2} V$$

 R_1 in parallel with series combination of R_2 and R_3

$$V_1 = V_{23}$$

$$R_2 = R_3 \Longrightarrow V_2 = V_3$$

$$V_{23} = V_2 + V_3 = 2V_2$$

$$\longrightarrow$$
 $V_1 = 2V_2 = V$