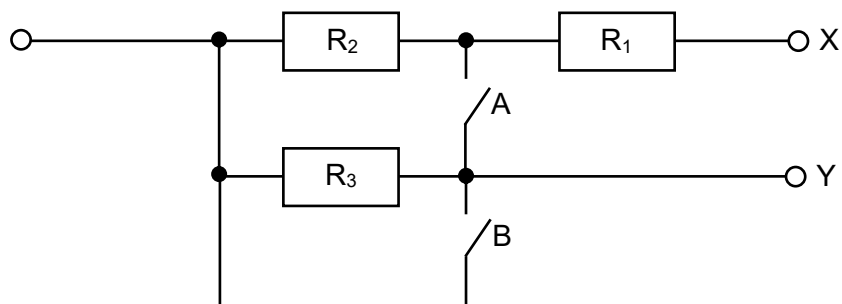


- 22 A circuit consists of three resistors  $R_1$ ,  $R_2$  and  $R_3$ , and two switches A and B, as shown in the figure.



The resistance between the terminals X and Y is measured for different settings of the switches A and B.

The results are shown in the table.

switch A	switch B	resistance between X and Y / $\text{k}\Omega$
open	open	24
open	closed	20
closed	open	12
closed	closed	12

What is the ratio of the  $\frac{\text{resistance of } R_1}{\text{resistance of } R_3}$ ?

- A 0.33      B 0.50      C 1.0      D 3.0