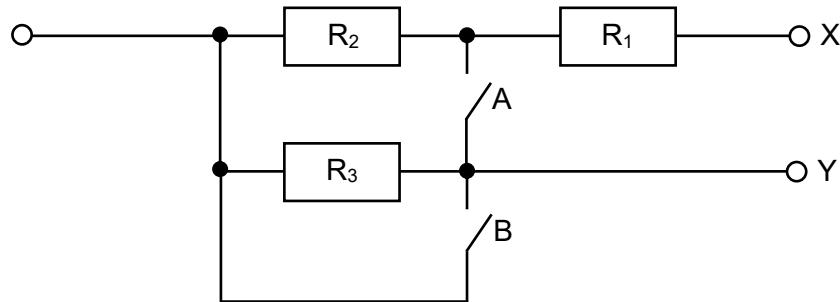


- 22** A circuit consists of three resistors R_1 , R_2 and R_3 , and two switches A and B, as shown in the figure.



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 / kΩ
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