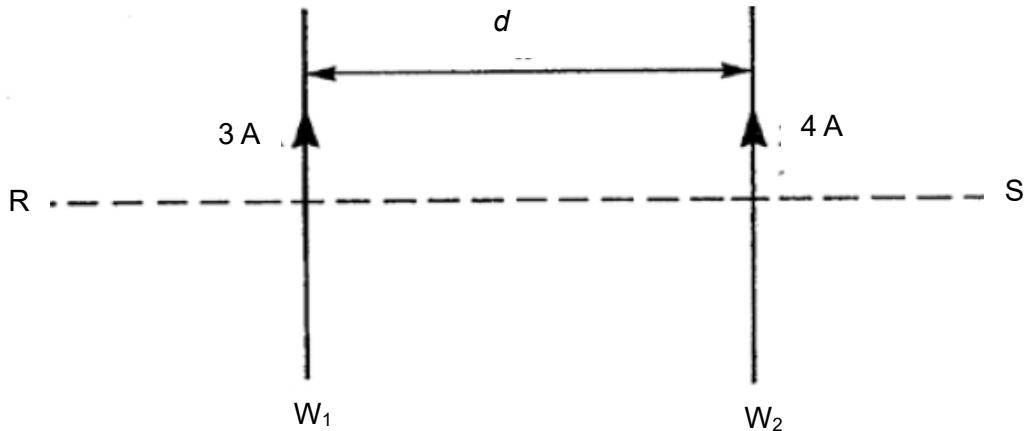


- 22** Two vertical wires  $W_1$  and  $W_2$  are distance  $d$  apart carrying currents of 3 A and 4 A respectively.



The combined magnetic fields due to these currents gives a position of zero magnetic flux density on the horizontal line RS passing through the wires.

What is the distance of this position from the wire  $W_1$ ?

A  $\frac{1}{4}d$

B  $\frac{3}{7}d$

C  $\frac{4}{7}d$

D  $\frac{3}{4}d$