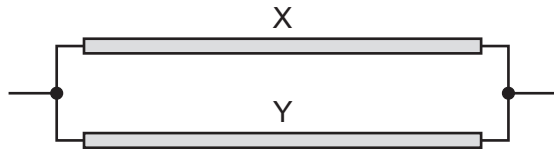**36** Two identical wires X and Y, each of length L and radius r, are connected in parallel as shown.

The total resistance of this combination is R_1.

Wire X is replaced with a wire of the same material with length L and radius $2r$.

The total resistance of the new combination is R_2.

What is the ratio $\dfrac{R_1}{R_2}$?

A $\dfrac{2}{5}$ **B** $\dfrac{2}{3}$ **C** $\dfrac{3}{2}$ **D** $\dfrac{5}{2}$