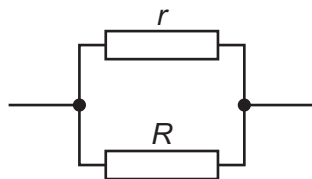


- 35 Two resistors of resistances  $r$  and  $R$  are connected in parallel.

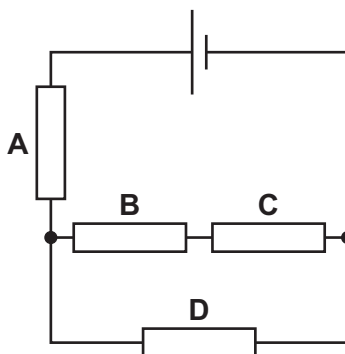
The value of  $r$  is less than that of  $R$ .



Which statement about the combined resistance of the two resistors is correct?

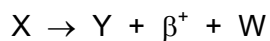
- A It is between  $r$  and  $R$ .
  - B It is equal to  $(r + R)$ .
  - C It is greater than  $(r + R)$ .
  - D It is less than  $r$ .
- 36 The diagram shows four identical resistors connected in a circuit.

Which resistor dissipates the most power?



- 37 Nuclide X with proton number  $Z$  undergoes  $\beta^+$  decay to form nuclide Y.

The decay may be represented by the equation shown.



What is the proton number of Y and which particle is represented by the symbol W?

	proton number of Y	particle represented by W
A	$Z - 1$	antineutrino
B	$Z - 1$	neutrino
C	$Z + 1$	antineutrino
D	$Z + 1$	neutrino