

- 33** A piece of wire X has resistivity  $\rho$ , length  $L$  and cross-sectional area  $A$ . Wire X has a resistance  $R$ .

A second piece of wire Y is made of a different metal. It has the same resistance as X but has twice the length of X.

Which row gives possible values for the resistivity and the cross-sectional area of Y?

	resistivity	cross-sectional area
<b>A</b>	$\frac{1}{2}\rho$	$\frac{1}{2}A$
<b>B</b>	$\frac{1}{2}\rho$	$A$
<b>C</b>	$\rho$	$\frac{1}{2}A$
<b>D</b>	$2\rho$	$A$