

- 5 A person calculates the potential difference across a wire by using the measurements shown.

Which measured quantity has the greatest contribution to the percentage uncertainty in the calculated potential difference?

	quantity	value	uncertainty
<b>A</b>	current / A	5.0	$\pm 0.5$
<b>B</b>	diameter of wire / mm	0.8	$\pm 0.1$
<b>C</b>	length of wire / m	150	$\pm 5$
<b>D</b>	resistivity of metal in wire / $\Omega \text{ m}$	$1.6 \times 10^{-8}$	$\pm 0.2 \times 10^{-8}$