

- 3** A galvanometer of resistance $5\ \Omega$ is to be used in a null method.

In order to protect the galvanometer from damage due to an excessive initial current, resistors of resistance $0.5\ \Omega$ and $1\ \text{k}\Omega$ are available.

Which arrangement would provide this protection?

- A** the $0.5\ \Omega$ resistor in series with the galvanometer
- B** the $0.5\ \Omega$ resistor in parallel with the galvanometer and this combination placed in series with the $1\ \text{k}\Omega$ resistor
- C** the $1\ \text{k}\Omega$ resistor in parallel with the galvanometer
- D** the $1\ \text{k}\Omega$ resistor in parallel with the galvanometer and this combination placed in series with the $0.5\ \Omega$ resistor