



1. The circuit shown in the diagram above is used to determine the internal resistance of a battery. The battery has an electromotive force of 12V and an internal resistance of  $10\Omega$ . The voltmeter reads 10V.

1.1 Calculate the current flowing through the circuit.



2. The circuit shown in the diagram above is used to determine the internal resistance of a battery. The battery has an electromotive force of 12V and an internal resistance of  $10\Omega$ . The voltmeter reads 10V.

2.1 Calculate the current flowing through the circuit.



3. The circuit shown in the diagram above is used to determine the internal resistance of a battery. The battery has an electromotive force of 12V and an internal resistance of  $10\Omega$ . The voltmeter reads 10V.

3.1 Calculate the current flowing through the circuit.



4. The circuit shown in the diagram above is used to determine the internal resistance of a battery. The battery has an electromotive force of 12V and an internal resistance of  $10\Omega$ . The voltmeter reads 10V.

4.1 Calculate the current flowing through the circuit.