

Week 2 Homework

1. List the 7 base SI quantities and their unit
2. A cuboid has dimensions 3 cm x 6 cm x 12 cm, what is its volume in SI units? Give your answer in standard form.
3. How long is 14 days in SI units? Give your answer in standard form.
4. A potential difference of 2 kV is applied across a wire with a resistance of 5 M Ω . Give your answer in mA.
5. **Force = Mass x Acceleration**
Derive the base units of Force
6. **Work done = Force x Distance**
Derive the base units of Work done
7. **Power = Work done / Time**
Derive the base units of Power

More difficult

8. **Voltage = Work done / Charge**
Derive the base units of Voltage