

Topic 1: Physical Quantities

1. Express the SI base unit for electric current according to the International System of Units.

Answer _____

2. Identify which of the following is a fundamental (base) physical quantity: Velocity, Force, Mass, or Work.

Answer _____

3. Determine the correct dimensional formula for mechanical energy or work (ML^2T^{-2}).

Answer _____

4. Convert a speed of 72 km/h into its equivalent value in standard SI base units (m/s).

Answer _____