



Physics: Vectors and Scalars

Vectors and Scalars (Chapter 8):

Definitions:

- Scalar: described by magnitude alone
- Scalar (eg.): distance, speed, time, mass, area, volume, energy, power
- Vector: described by both a magnitude and a direction
- Vector (eg.): displacement, velocity, acceleration, force, momentum

Sine rule: $\frac{\sin A}{a} = \frac{\sin B}{b} = \frac{\sin C}{c}$

Cosine rule: $c^2 = a^2 + b^2 - 2ab \cos \gamma$