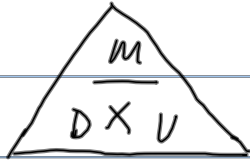


Density

Ch. 32

**Density**: Density is mass divided by volume.  
(kg/m<sup>3</sup>)

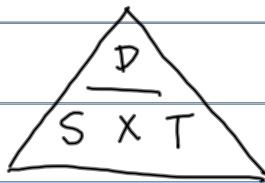


"monkey's drink vodka"

Motion

Ch. 33

**Speed**: Speed is distance divided by time. (m/s)



"dad's silly triangle"

**Velocity**: Velocity is speed in a given direction.  
(m/s)

**Acceleration**: Change in velocity divided by time.  
(m/s<sup>2</sup>)

$$a = \frac{v_2 - v_1}{t}$$

Ch.34

**Force**: Force causes acceleration. (N)

**Weight**: Force due to gravity (N)

**Friction**: A force that slows something. (N)

**Hooke's Law**: The extension of a spring is directly proportional to the force causing it.

Ch.35

**Moment**: The moment of a force is - force times the distance from the fulcrum (Nm).

$$M = F \times d$$

**Lever**: A lever is a rigid body that is free to rotate about a fixed point called a fulcrum.