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Force equations

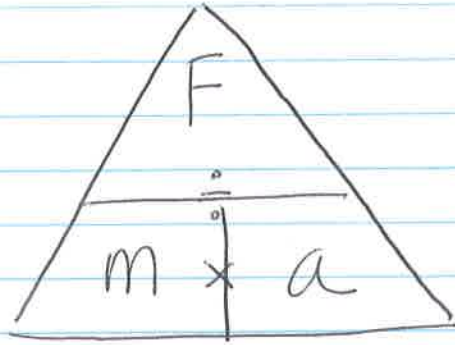
Force = mass \times acceleration $\boxed{F=ma}$

(SI units) $[N]$ $[kg] \times [m/s^2]$
↑
Newton

$$F = ma$$

$$m = \frac{F}{a}$$

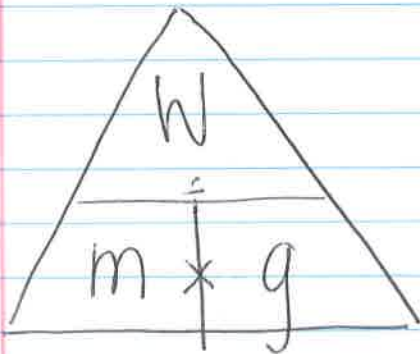
$$a = \frac{F}{m}$$



Weight is a force that is equal to

mass \times gravitational acceleration $\boxed{W=mg}$

(SI units) $N = kg \frac{m}{s^2}$



$$W = mg$$

$$m = \frac{W}{g}$$

$$g = \frac{W}{m}$$