

# Formulas for physics term 1

GON

Table 1: Mirror Formulas

$m = h'/h$	Magnification with image and object height given
$m = -v/u$	Magnification with image and object position for mirrors
$f = C/2$	Focal Length = 1/Radius of curvature
$1/f = 1/v + 1/u$	Mirror formula
$\angle i = \angle r$	Angle of Incidence = Angle of Reflection

Table 2: Lens Formulas

$m = h'/h$	Magnification with image and object height given for lens
$m = v/u$	Magnification with image and object position for lens
$1/f = 1/v - 1/u$	Lens Formula
$m = 1/f(\text{in meters})$	Magnification when focal length is given (Only for lens)
$\angle i = \angle r$	Angle of Incidence = Angle of Reflection

Table 3: Refraction

$\sin(i)/\sin(r)$	Snell's Law
$n = c/v$	Refractive Index
$n_{AB} = n_A/n_B$	Refractive Index of A with respect to B

Table 4: Important Values

$3 \times 10^8 \text{ m/s}$	Speed of Light
$3/2 = 1.5$	Refractive Index of Glass
$4/3 = 1.33$	Refractive Index of Water