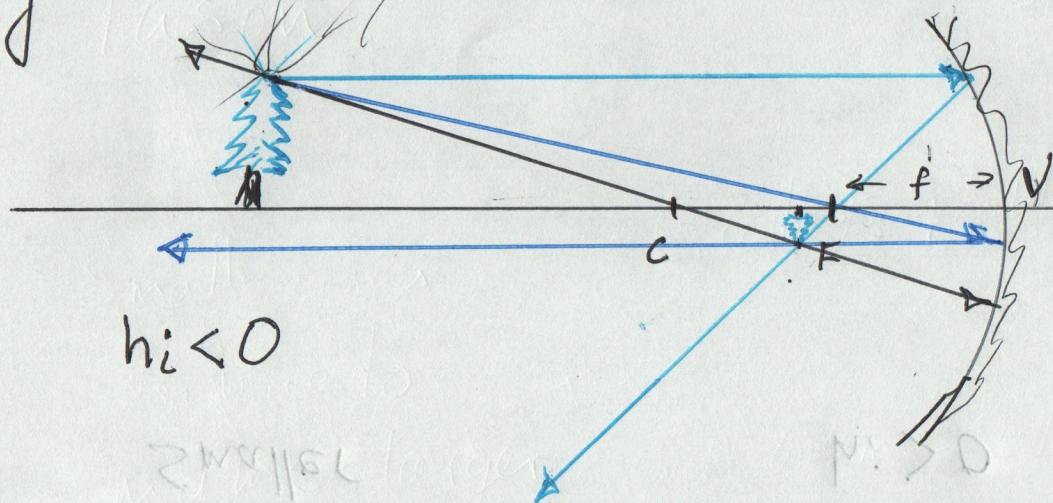Ray Diagram
concave mirror

Real (light actually arrives at image)

Inverted

Smaller

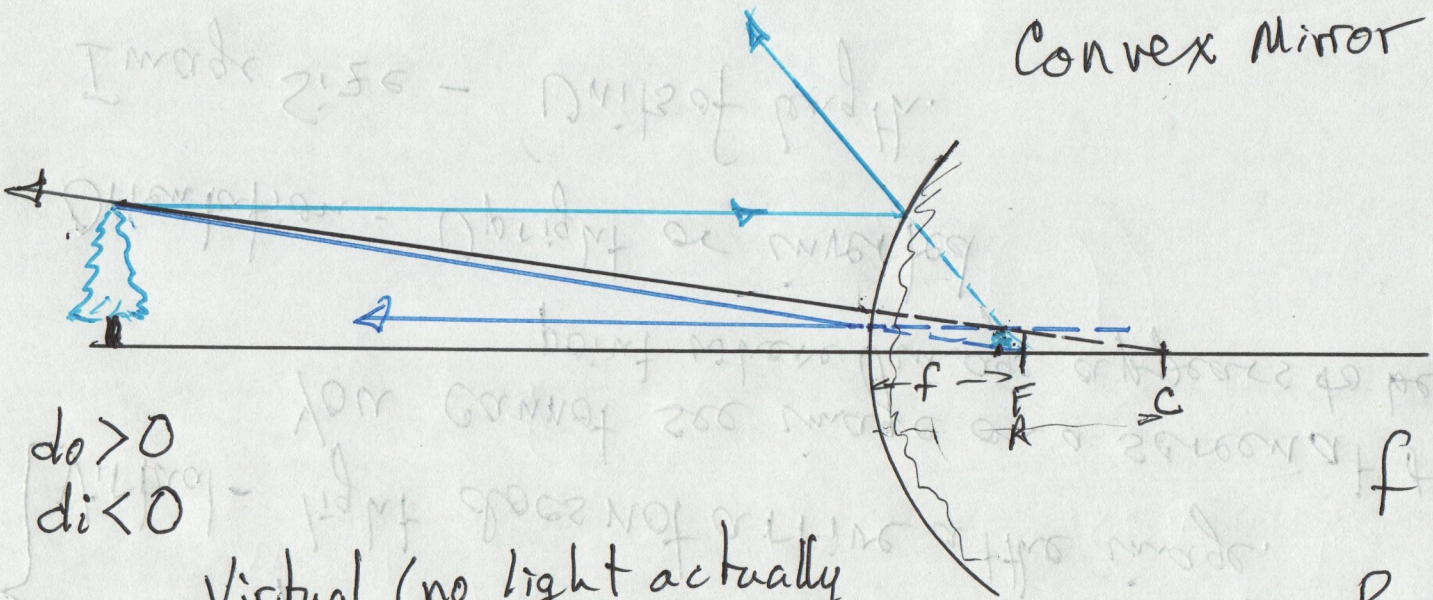$f > 0$

$R > 0$

$d_o > 0$

$h_i < 0$

$d_i > 0$

$h_o > 0$

Type
{
Real - light actually arrives at the image.
You can put a screen at the image to see the object.

Virtual - light does not arrive a the image.
You cannot see image on a screen at the the
point where image appears to be.

Orientation - Upright or inverted

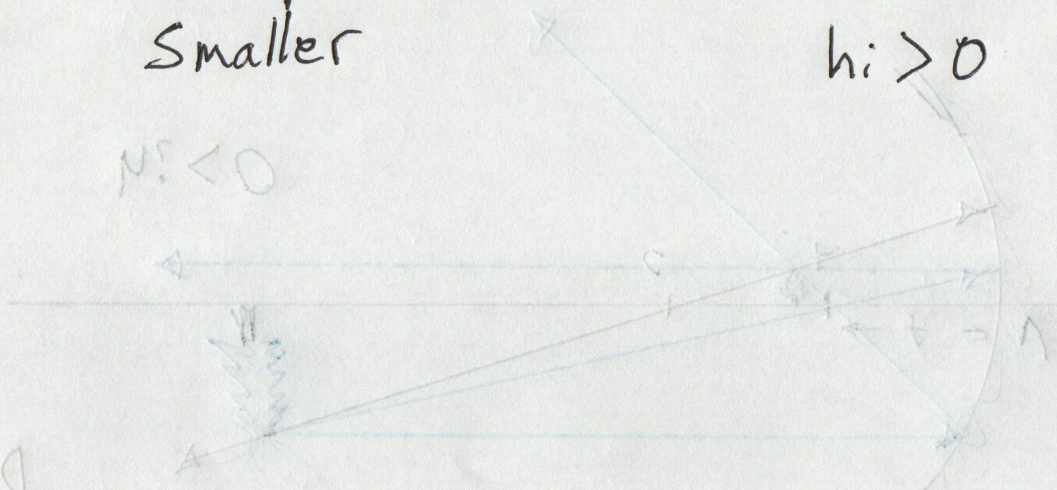Image Size - Units of length.

Convex Mirror
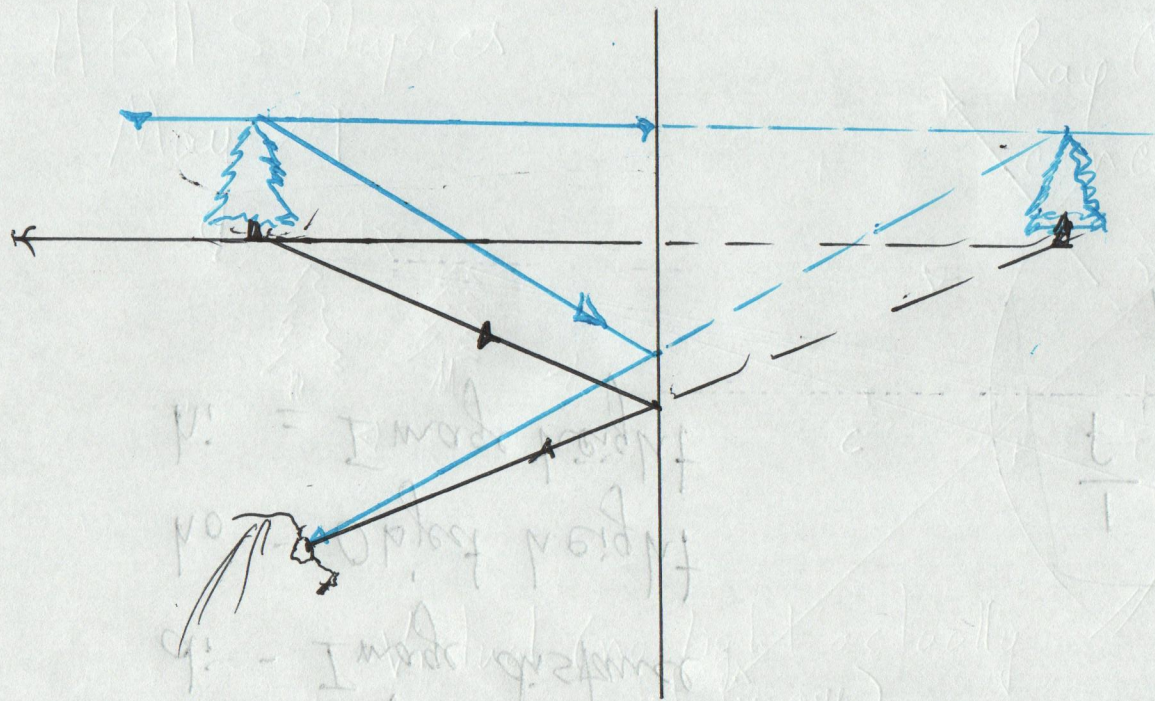
$d_o > 0$
$d_i < 0$
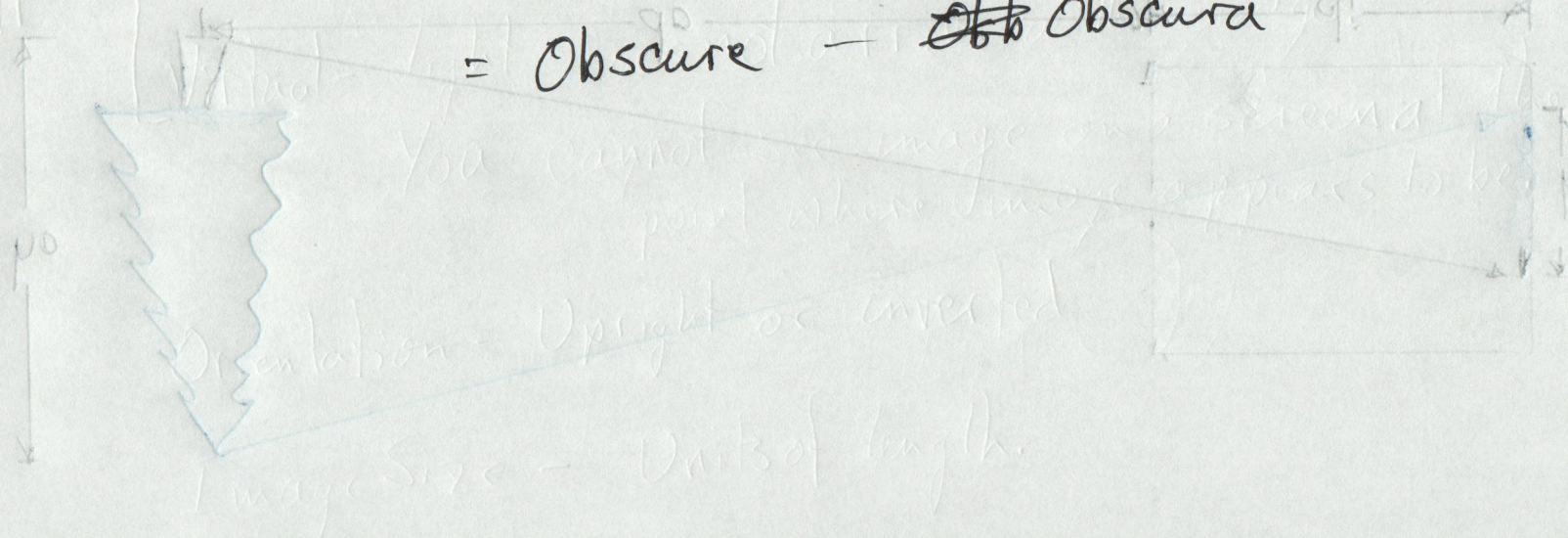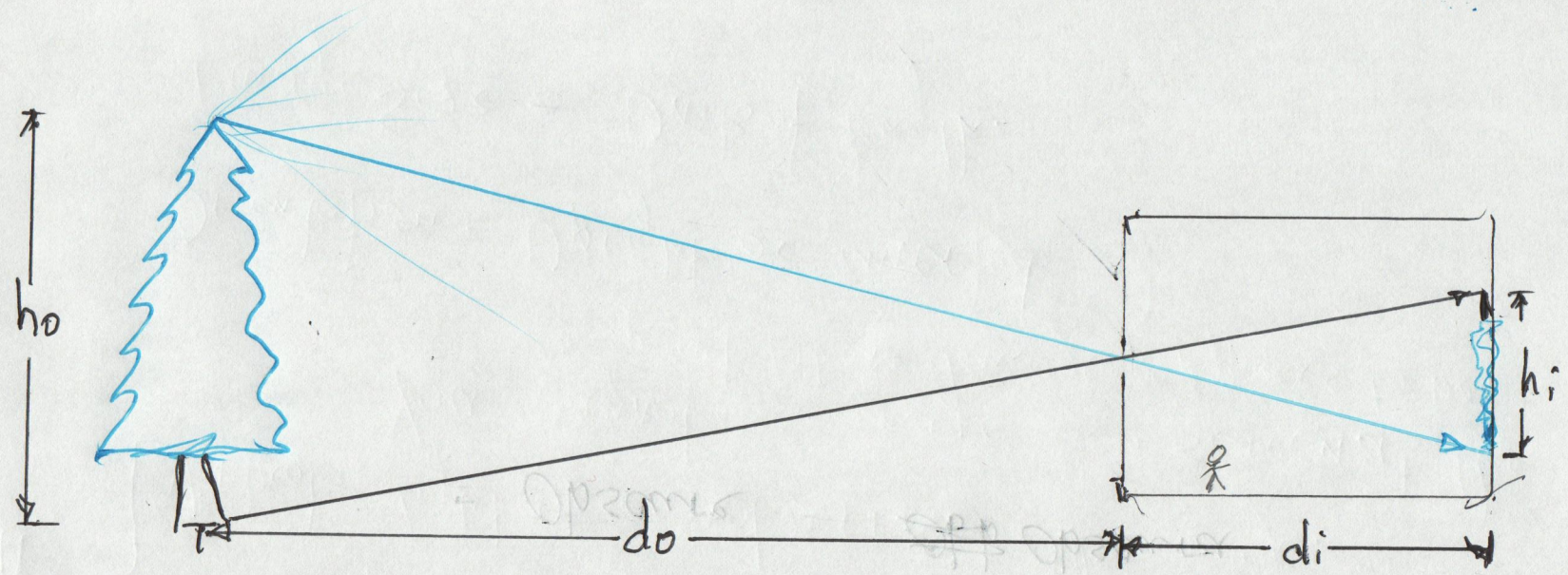
Virtual (no light actually
at image)

Upright
Smaller

$h_o > 0$
$h_i > 0$

$f < 0$

$R < 0$

Virtual
(can't put a screen at the image).
Upright
Same size

Room = Chambre = Camera

= Obscure — ~~Obs~~ Obscura

h_o

d_o

d_i

h_i

do — Object distance

di — Image distance

ho — Object height

hi = Image height

$$M = \frac{h_i}{h_o} = -\frac{d_i}{d_o}$$

$$\frac{1}{f} = \frac{1}{d_o} + \frac{1}{d_i}$$

Mirror Equation