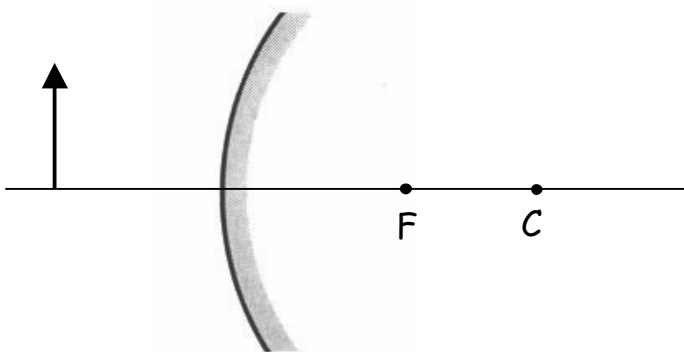spherical aberration –

_____ mirrors correct the problem.

Convex Mirrors

All images produced by convex mirrors are *(real, virtual)*. *(erect, inverted)*, and *(larger, smaller)* than the object.   Convex mirrors are called _____ mirrors since their reflected light rays seem to spread out from behind the mirror.

Use ray diagrams (same rules as concave mirrors) on this diagram.

F   C

Mirror Math:

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

_____

+d_i and +f means

_____ the mirror

_____

_____

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

+h_i : Image is erect (_____)

-h_i : Image is inverted (_____)

_____

$\dfrac{h_i}{h_o}$ is called the _____ of the mirror.

Ex: An 4cm tall object is placed 60 centimeters in front of a concave mirror with a focal length of 20 cm.   Calculate d_i and h_i.

Problem Set #1 (a-d)

Convex Mirror Example:
Locate the image formed by a 4.0 cm tall object places 60. cm in front of a convex mirror with a focal length of 20. cm.

Calculate the height of the image.