MASTER-1

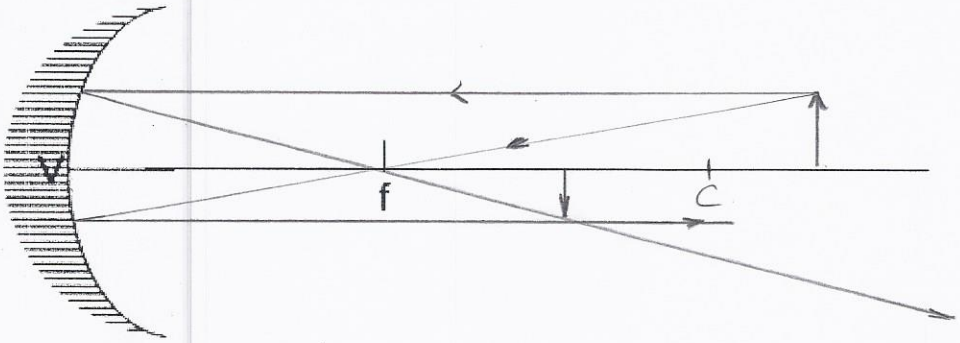
SNC 2DI : Unit 3 Optics

Drawing Ray Diagrams with concave mirrors

Concave Mirrors - Object beyond the centre of curvature

Measure the focal length and draw the centre of curvature on the principal axis.

Draw an object one centimeter tall on the principal axis beyond the centre of curvature.



L In front (Closer)

O Inverted

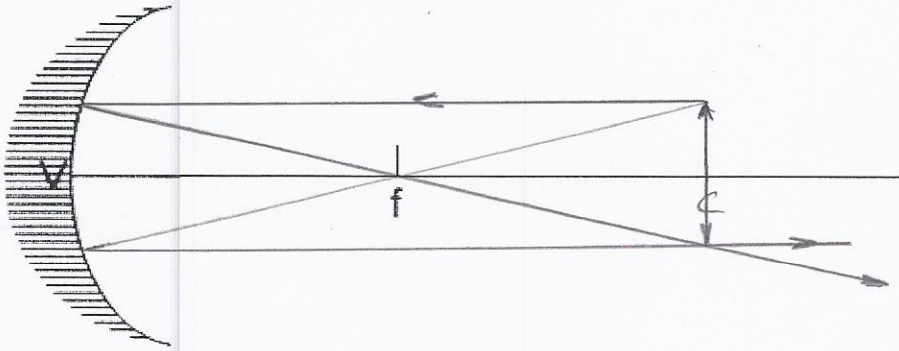
S Smaller

T Real

Concave Mirrors - Object at the centre of curvature

Measure the focal length and draw the centre of curvature on the principal axis.

Draw an object one centimeter tall on the principal axis at the centre of curvature.



L In front (Same)

O Inverted

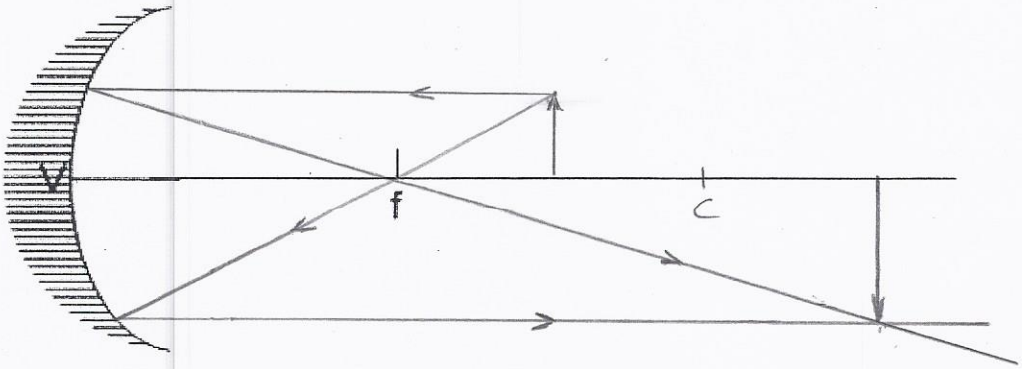
S Same

T Real

Concave Mirrors - Object between the centre of curvature and the focal point

Measure the focal length and draw the centre of curvature on the principal axis.

Draw an object one centimeter tall on the principal axis between the centre of curvature and focal point.



L In front (farther)

O Inverted

S Larger

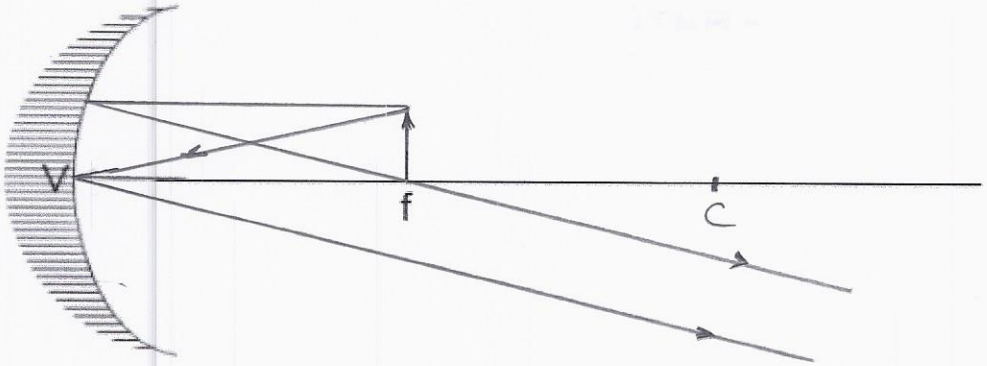
T Real

MASTER-2

Concave Mirrors - Object at the focal point

Measure the focal length and draw the centre of curvature on the principal axis.

Draw an object one centimeter tall on the principal axis at the focal point.

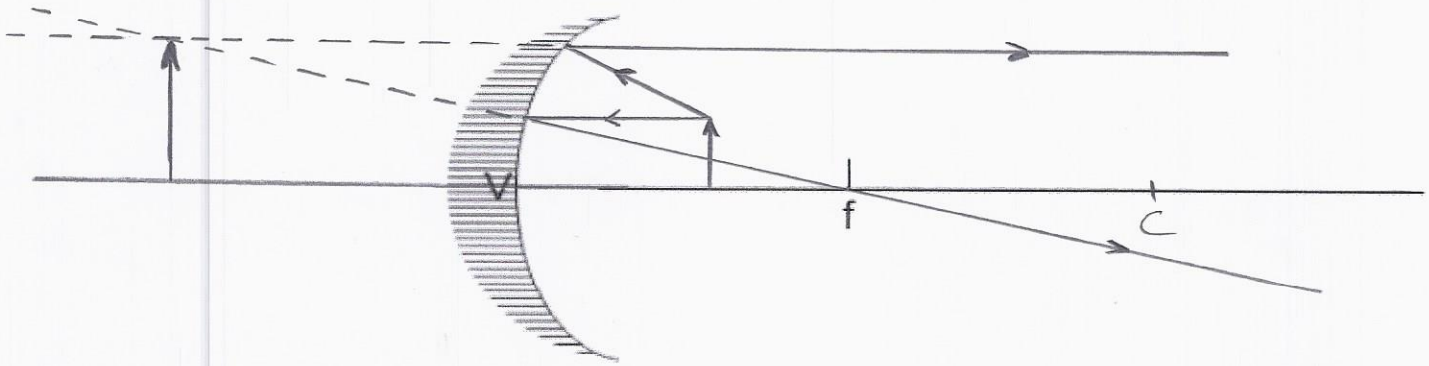


L
O
S
T
no image (reflected rays are parallel)

Concave Mirrors - Object between the focal point and the vertex

Measure the focal length and draw the centre of curvature on the principal axis.

Draw an object one centimeter tall on the principal axis between the vertex and focal point.



L Behind

O Upright

S Larger

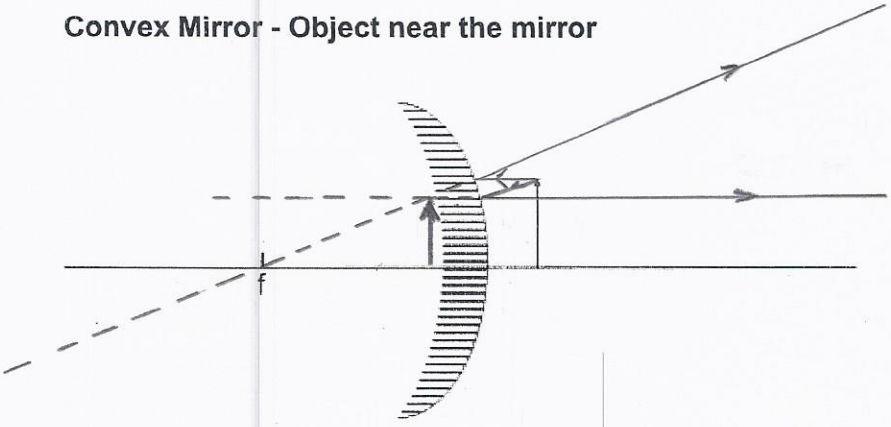
T Virtual

MASTER-3

SNC 2DI : Unit 3 Optics

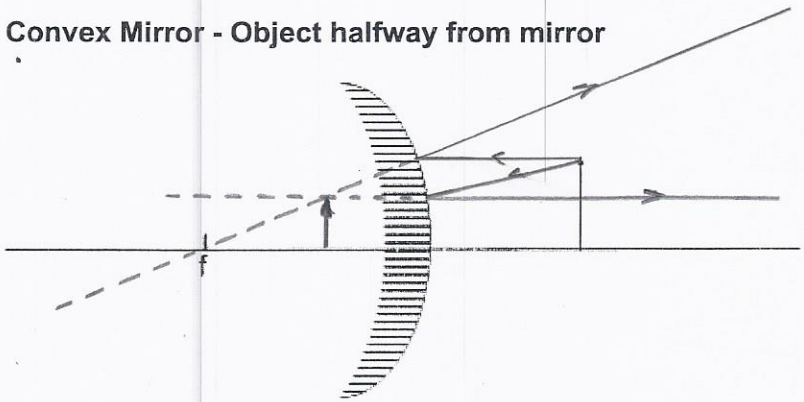
Drawing Ray Diagrams with convex mirrors

Convex Mirror - Object near the mirror



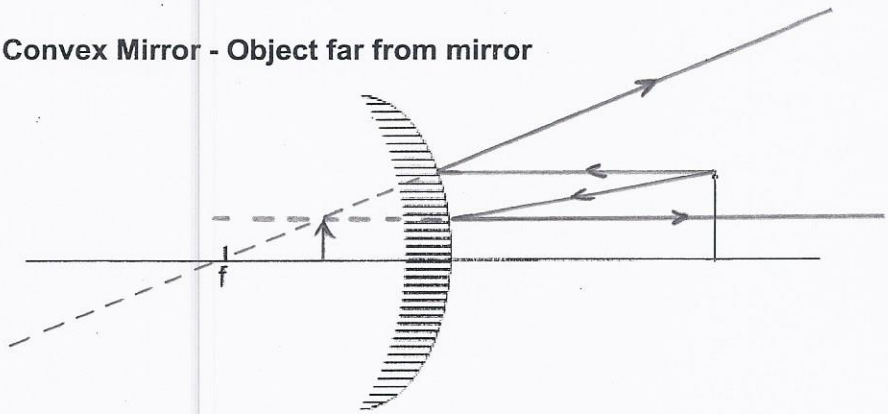
L Behind
O Upright
S Smaller
T Virtual

Convex Mirror - Object halfway from mirror



L Behind
O Upright
S Smaller
T Virtual

Convex Mirror - Object far from mirror



L Behind
O Upright
S Smaller
T Virtual

How does the image change as the object moves further away from the mirror?

As object moves further away, the virtual image remains upright and gets smaller.