

concave mirror

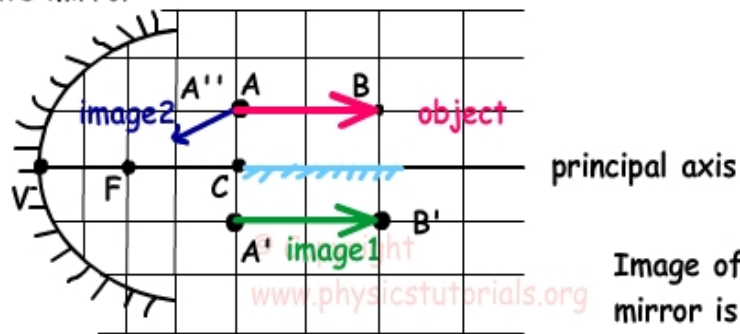


Image of the object from the plane mirror is located at A' B' points

The image located at A'B' is object for concave mirror. We use mirror equations to find final location and height of the image.

$$\frac{1}{f} = \frac{1}{D_o} + \frac{1}{D_i}$$

We use this formula for points A' and B'

Since A' is located at the center of the mirror, its image also located at the center inverted and real.

$$\frac{1}{2} = \frac{1}{6} + \frac{1}{D_i}$$

$$D_i = 3$$

$$\frac{D_o}{D_i} = \frac{H_o}{H_i} = 2$$

So, height of the image is half of the real height. It is given in blue in the picture given above.