

hhh.36.12_36.16

**Please read pages 348 through 350
memorize the mirror equation (page 350)**

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

I usually use d for distance instead of s like the book does

**memorize the formula for Transverse magnification (or just magnification)
Memorize the convention for concave mirrors and convex mirrors in terms of real and virtual images (top of page 349)**

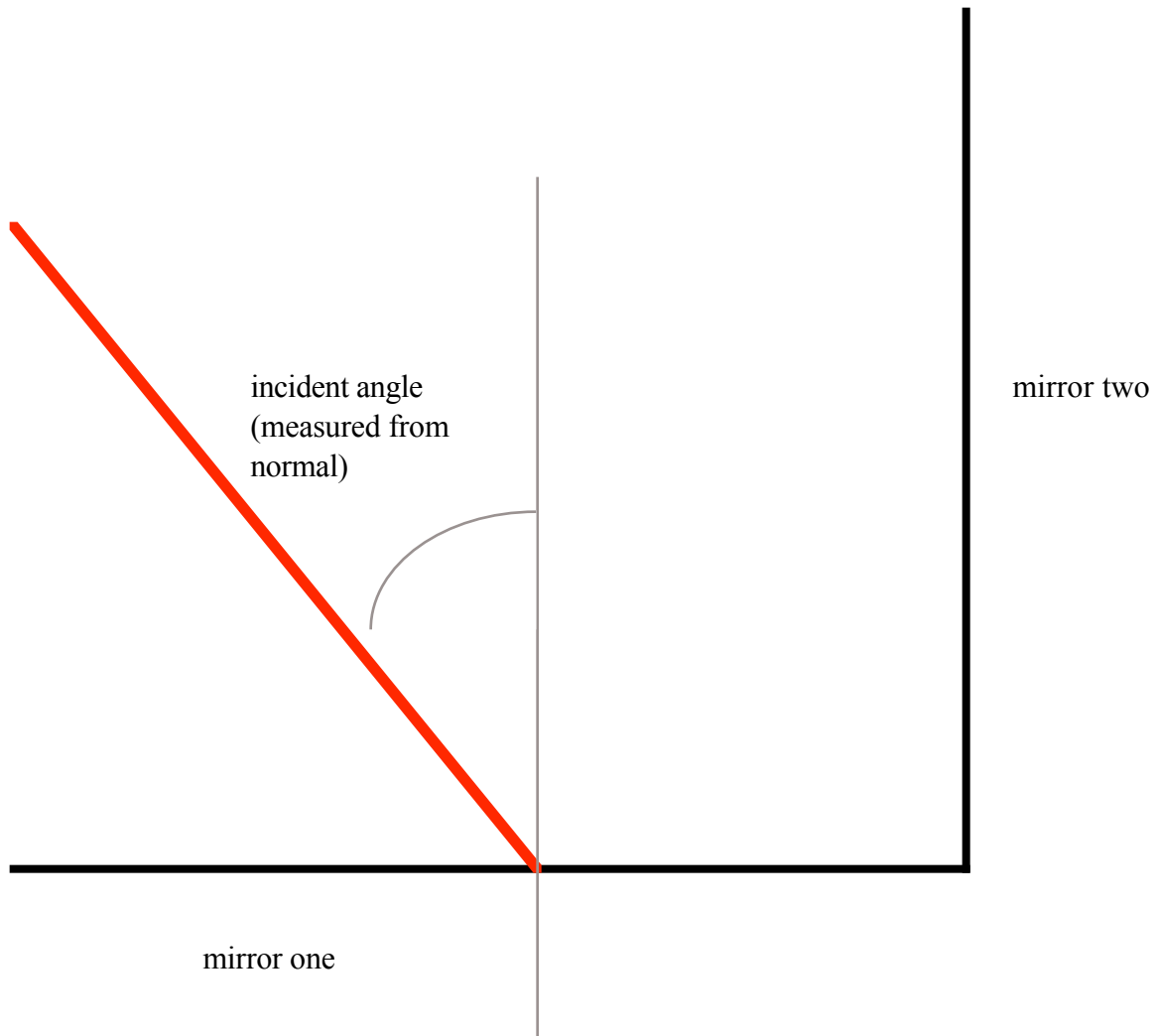
**A real image is one that can be projected onto a screen (like at a movie theater)
A virtual image is one that cannot be projected onto a screen (your reflection in a mirror)**

- **A concave mirror can give a real image therefore its focal length is positive**
- **A convex mirror cannot give a real image therefore its focal length is negative**

36.12, Plane mirror means flat mirror so the image will be on the other side of the mirror as a *virtual* image the same distance as the object is in front of the mirror.

36.13. Divide 360 by the angle between the two mirrors and then subtract 1 from this to get the number of images seen.

36,15 Draw a diagram of this on the figure below. Remember that the incident angle is equal to the angle of reflection. **This angle is measured from a line normal to the surface of the mirror.**



36.16 Since the angle of incidence and the angle of reflection equal each other they add.