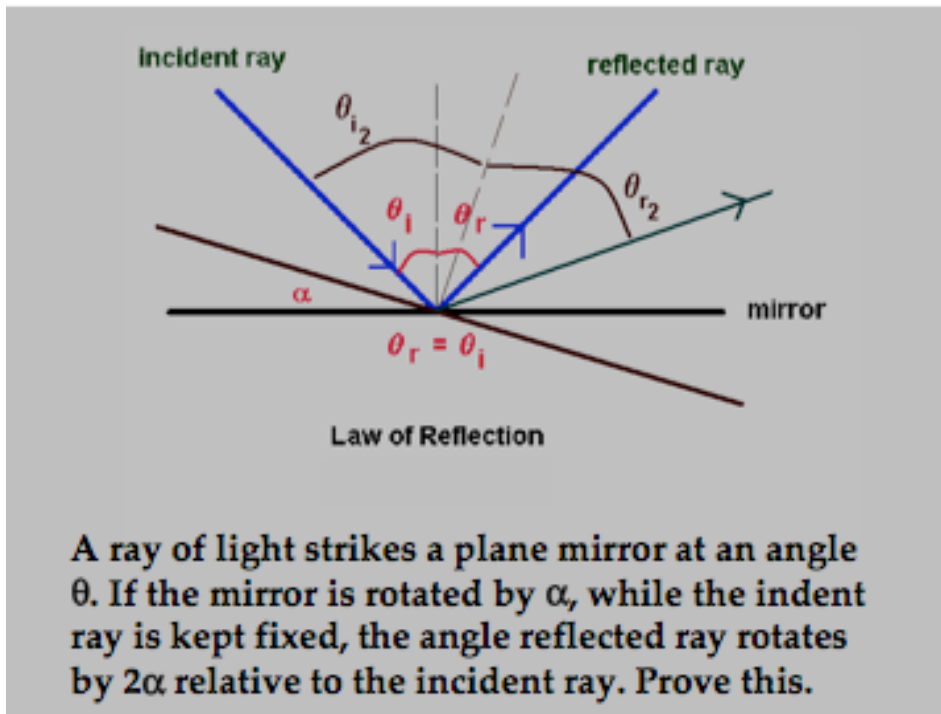


Reminders 4-08-08:

- Conceptual Questions on Color Due in Lab this Week.**
- Conceptual Questions on Geometrical Optics due Tuesday.**
- Read Chapter 23**
- Lens Lab Has Been Changed**

Objectives:

- Mirrors and Image Formation by Reflection**
- Lenses Mirrors Formation by Refraction**
- Ray Tracing**



$$\theta_{i2} = \theta_{i1} + \alpha$$

$$\theta_{r2} = \theta_{r1} + \alpha$$

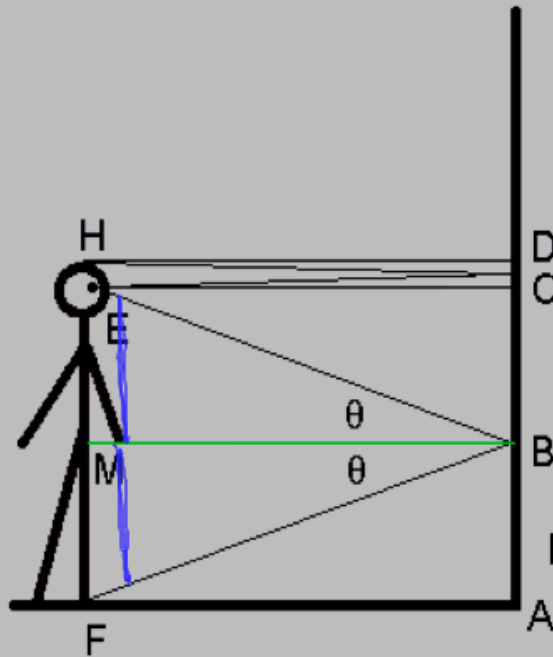
Angle between incident ray and reflected

ray before mirror is rotated is $\theta_{r1} + \theta_{i1}$

When the mirror is rotated the angle between the incident ray and the reflected ray is

$$\theta_{r2} + \theta_{i2} = (\theta_{r1} + \alpha) + (\theta_{i1} + \alpha) = (\theta_{r1} + \theta_{i1} + 2\alpha)$$

What is the minimum mirror height that is required to see an image of you in a mirror?



Remove upper half of DC

Half your height

Remove BA

$$EM = MF = 0.5EF$$

$$EM = CB$$

$$CB + 0.5DC = 0.5HF$$

