

## Physics 114 - April 9, 2015

■ Exam 2 graded, Solns + distribution posted (mean = 74)

■ Exam 3 - Hoyt - Thurs Apr. 16 - During lecture time

P.S. 9 + 10

Workshops 8-10

Lecture March 17 - Start of April 7

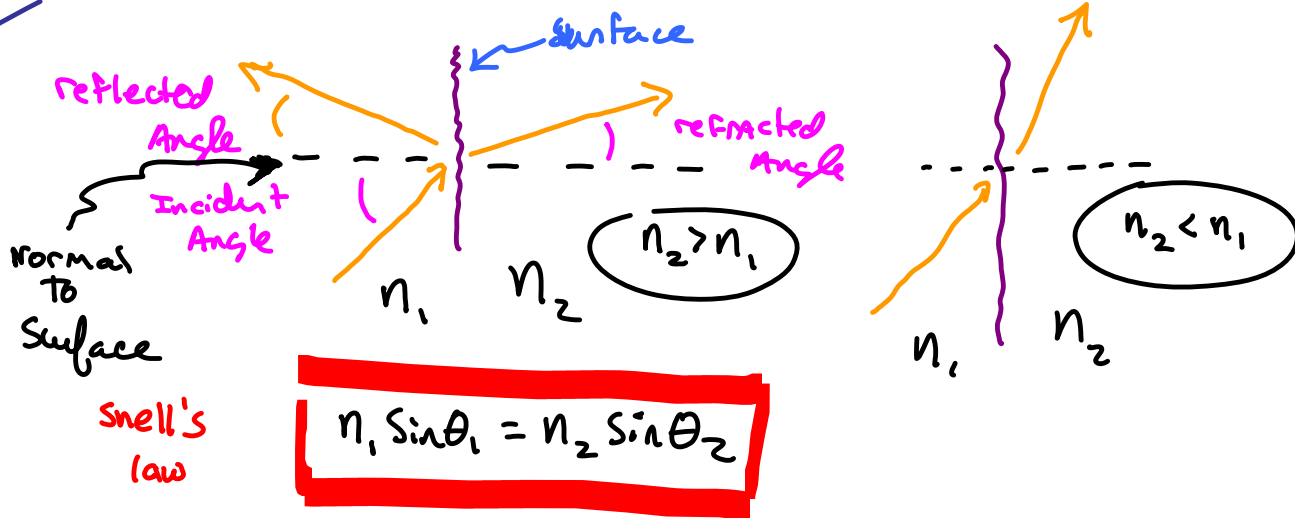
Text Ch. 28-31 (NOT 30-6 to 30-11)

■ Q+A Tues. ~5pm TBA

Last Time

# Geometric Optics

$n = c/v \equiv$  index of refraction



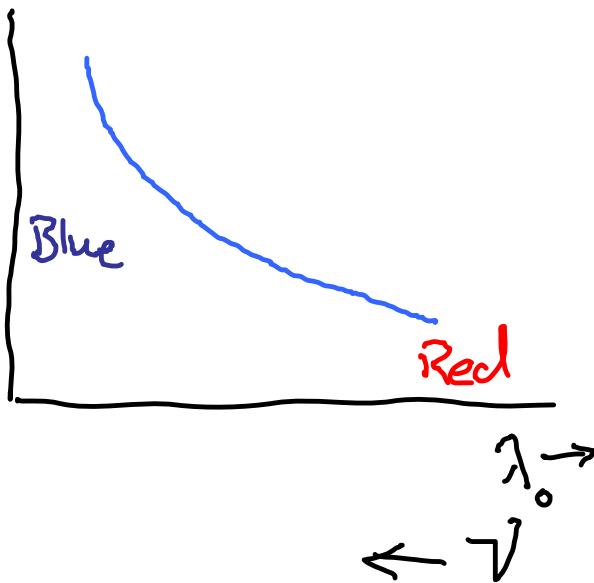
Critical Angle  $\equiv \theta_c \rightarrow$  angle of Inc. when angle of refr. is  $90^\circ$

$\theta_i > \theta_c \rightarrow$  Total internal reflection

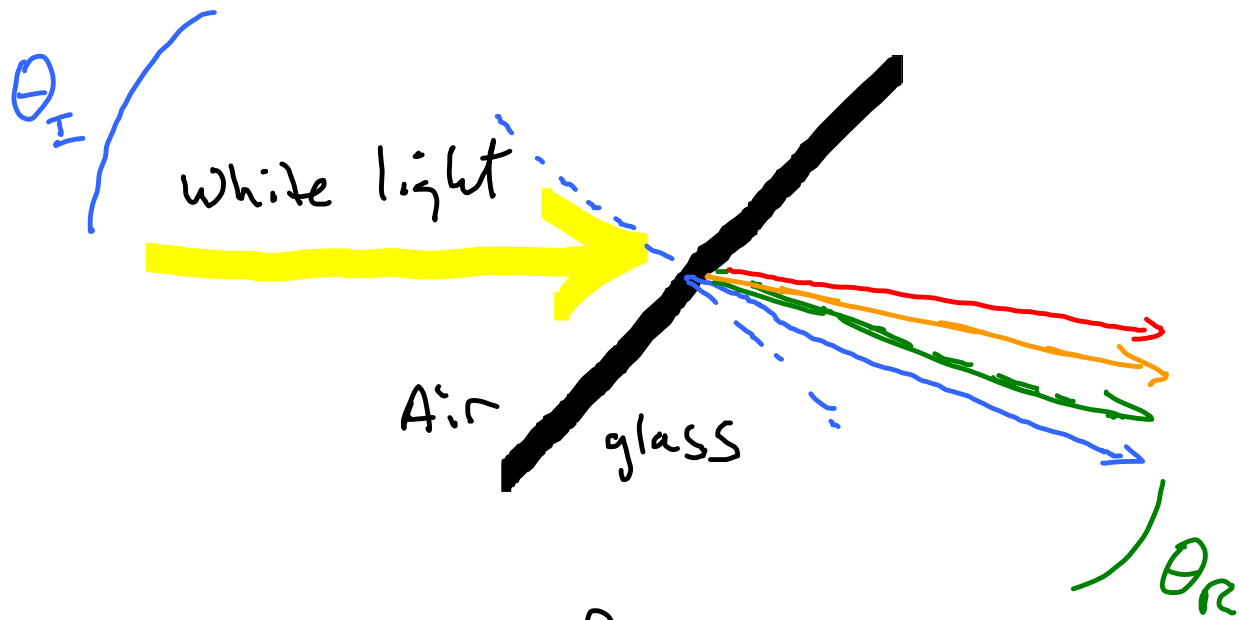
Dispersion

$n$  depends on  $v$  (or  $\lambda$ )

$$\frac{c}{v} = n$$

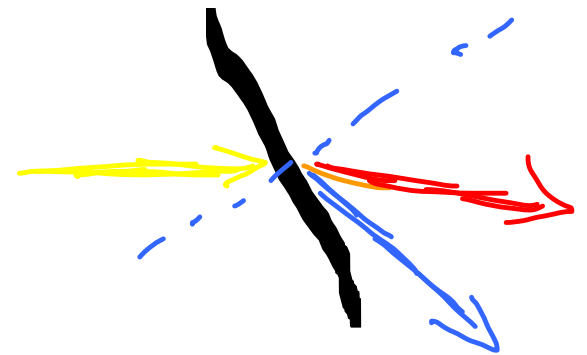
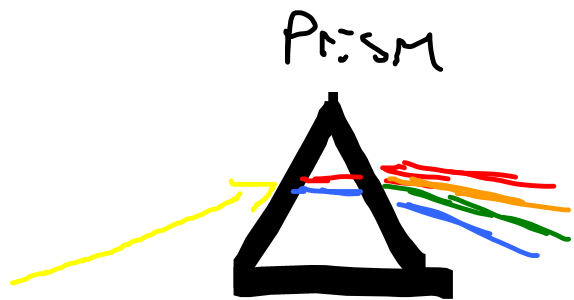


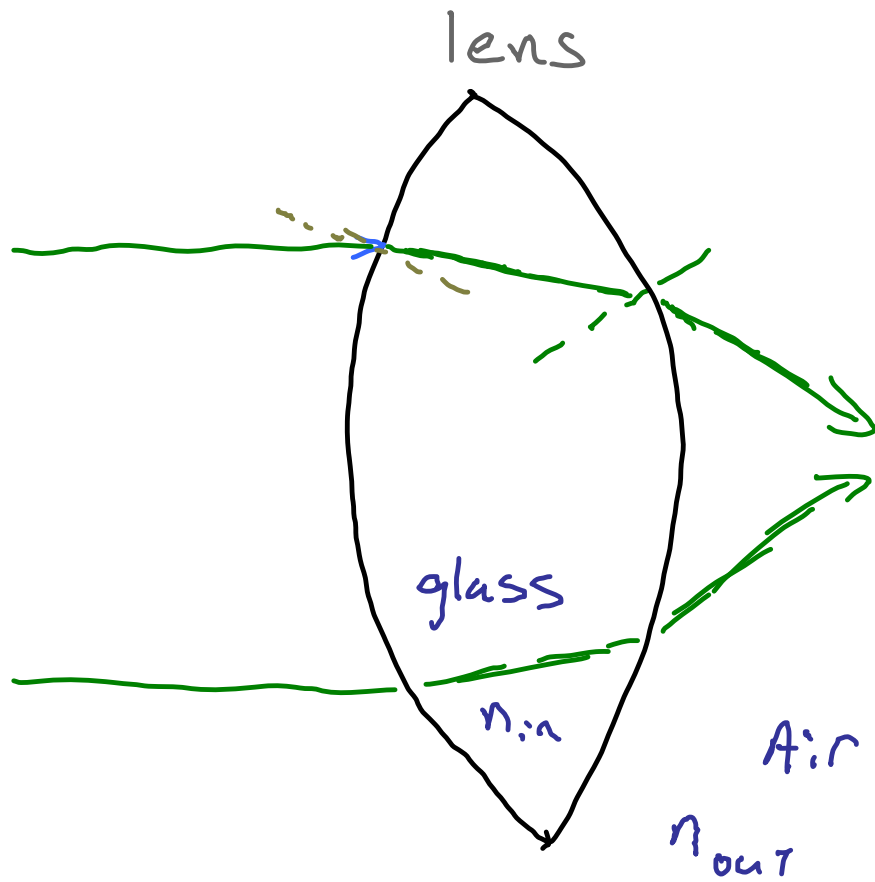
$$v = \lambda \nu$$



$$n_{Air} \sin \theta_I = n_{glass} \sin \theta_R$$

$$\frac{n_A}{n_g} \sin \theta_I = \sin \theta_R$$





converging lens

