

40  
11-15-13

CH. 34, 35, 36, 18 REVIEW

for tests.

CH (34.) → 2, 7, 12, 8, 15, 31, 29

39, 38, 42, 58, 59, 64

CH (35.) → 7, 11, 12, 20, 28, 31

32, 33, 41

CH (36.) → 1, 3, 12, 25, 19, 14,

19, 20, 22, 28, 39,

43, 45, 53, 51

CH 39

(STAR)  
object  
from  $\infty$ :

CH.

Telescope HINT

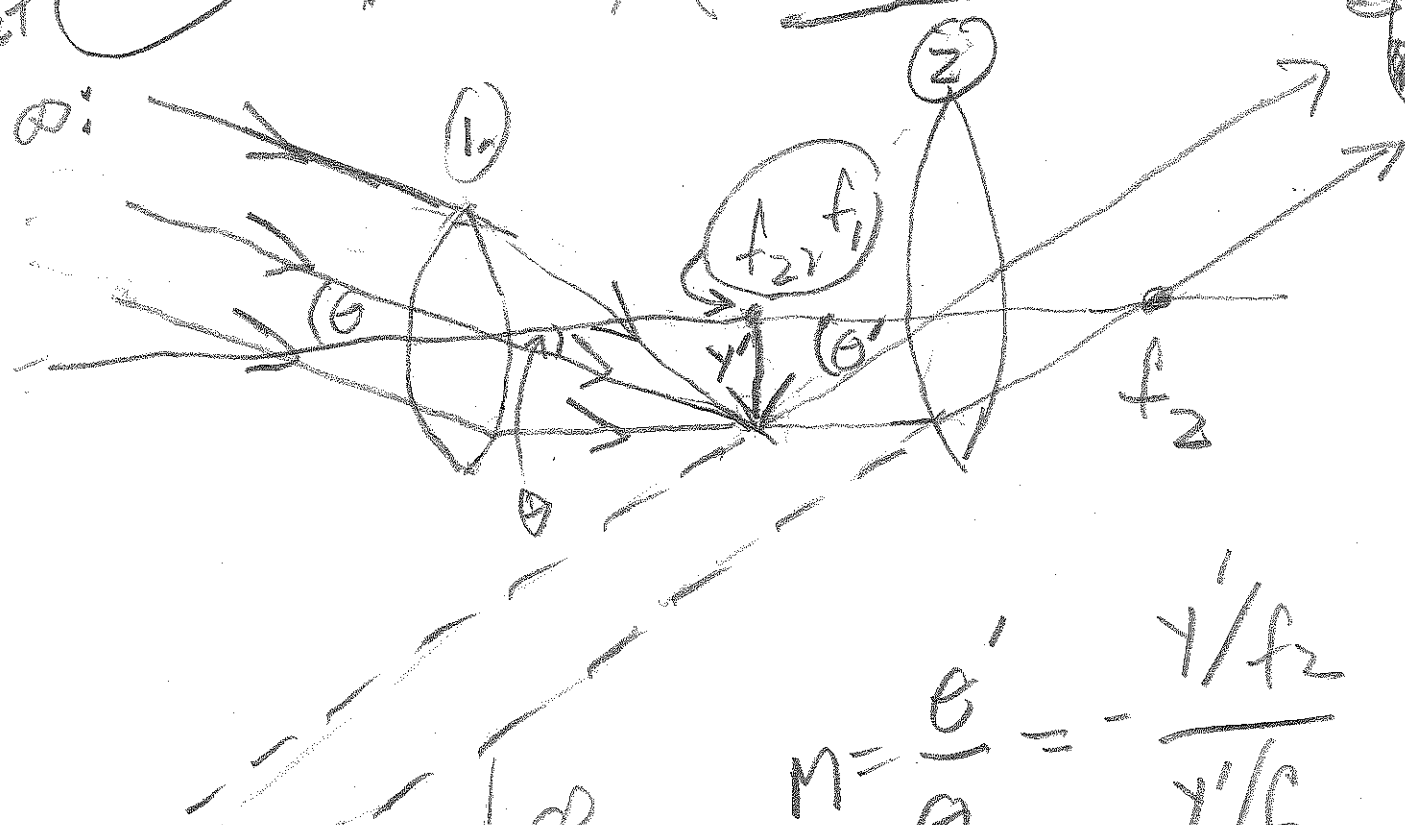
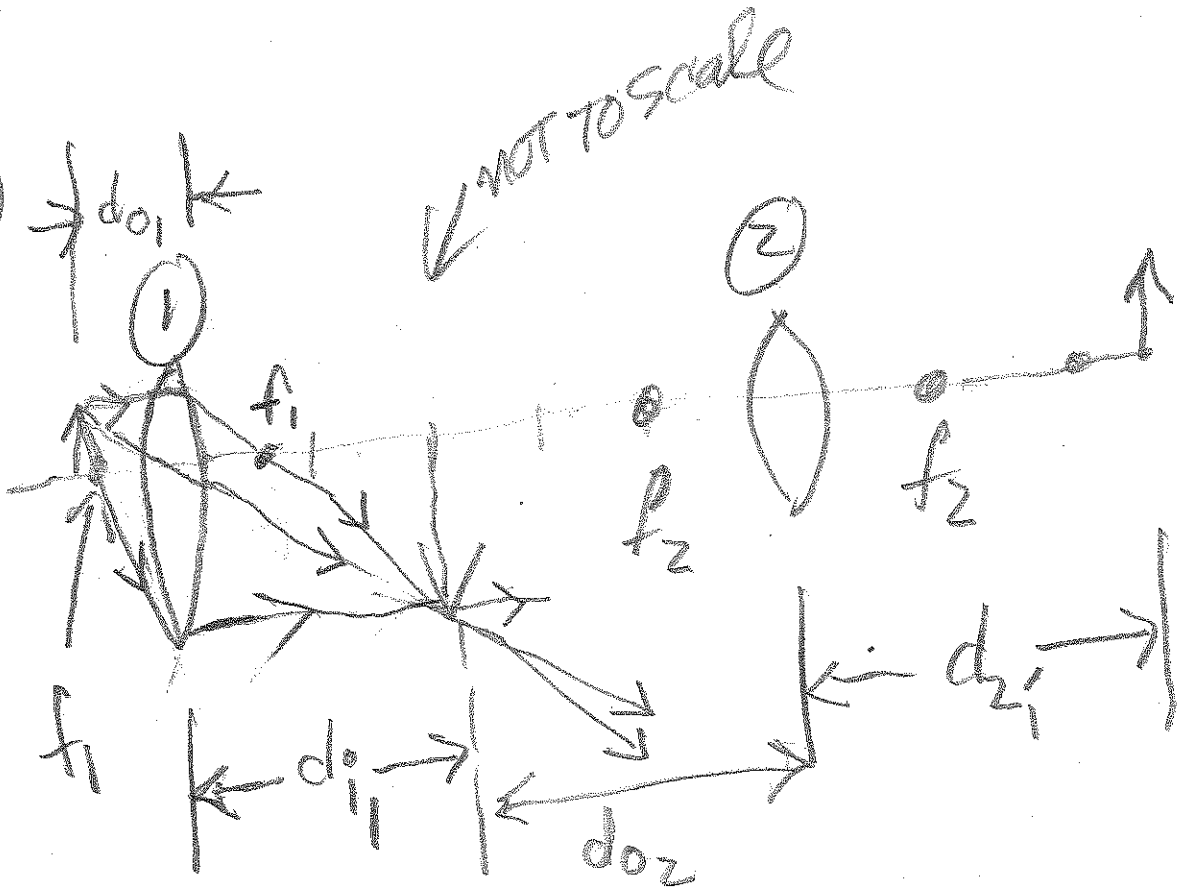


image at  $\infty$

$$M = \frac{e'}{\theta} = - \frac{y'/f_2}{y/f_1} = - \frac{f_1}{f_2}$$

CH 34

39.



$$\frac{1}{80} = \frac{1}{50} + \frac{1}{d_{i1}}$$

$$d_{i1} = \frac{(40)(50)}{50 - 40} = \frac{2000}{10}$$

$$= 200 \text{ m}$$

$$300 - 200 = 100$$

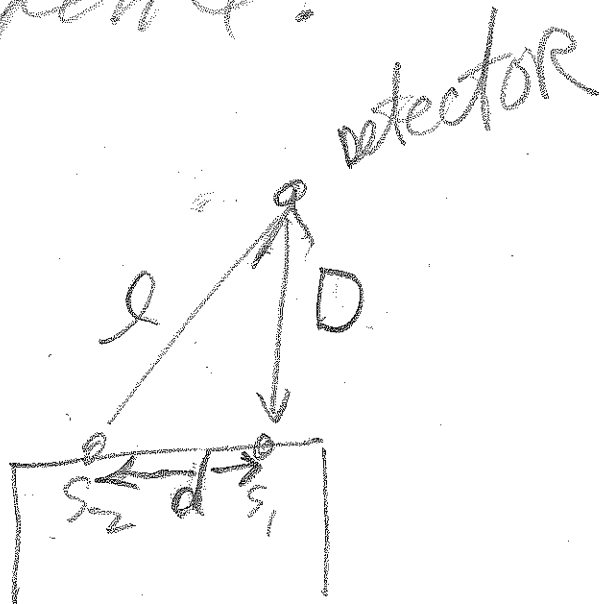
$$\frac{1}{60} = \frac{1}{100} + \frac{1}{d_{i2}} \Rightarrow d_{i2} = \frac{(100)(60)}{100 - 60} = \frac{6000}{40} = \frac{300}{2} = 150 \text{ m}$$

CH 35

THIN FILMS ROAD  
in CLASS

Interference:

(7.)



$$r_2 - r_1$$

$$= \sqrt{d^2 + D^2} - D$$

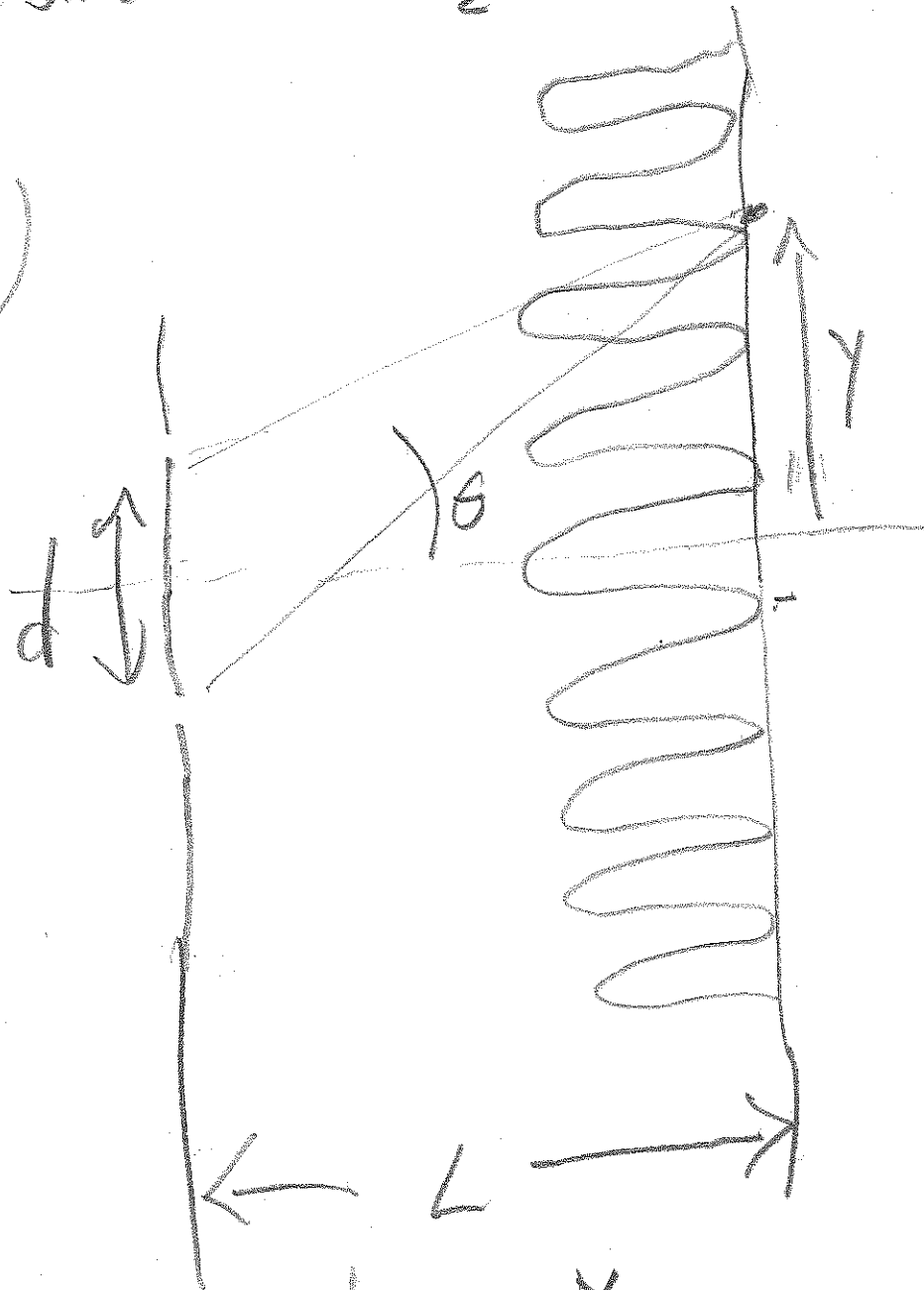
$$r_2 - r_1 = n\lambda \text{ CONST.}$$

$$r_2 - r_1 = (2n' + 1) \frac{\lambda}{2} \text{ DESTROY}$$

$$d \sin \theta = n \cdot \lambda \quad \text{const.}$$

$$d \sin \theta = (2n' + 1) \frac{\lambda}{2} \quad \text{destr.}$$

(11)



$$\sin \theta \approx \frac{Y}{L}$$

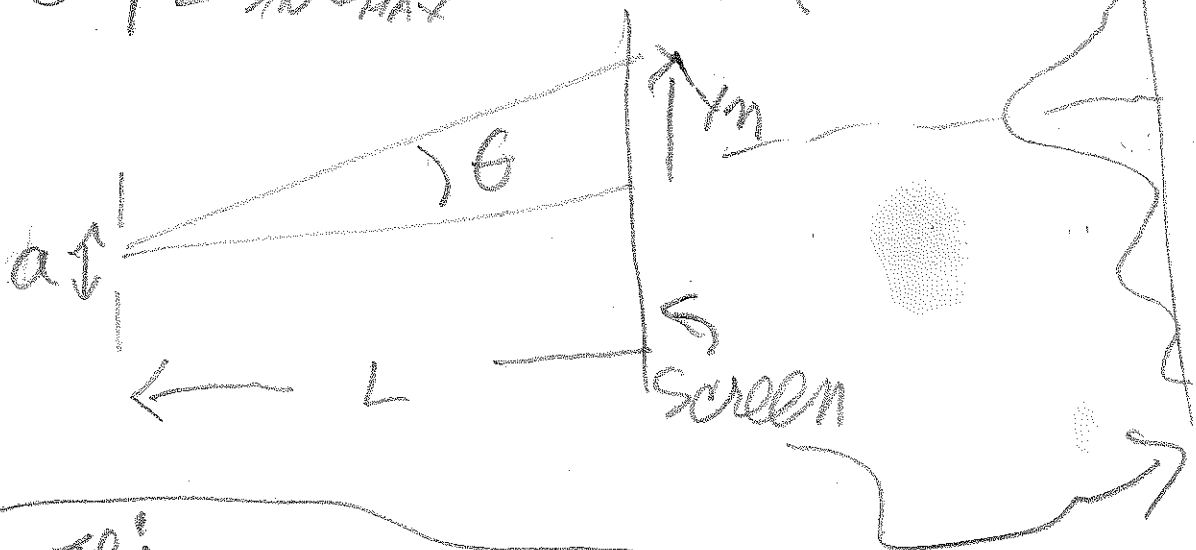
$$\frac{d \cdot Y_m}{L} = n \lambda \quad ; \quad \frac{d Y_{n'}}{L} = (2n' + 1) \frac{\lambda}{2}$$

const. destr

Ch 36

3.

$$a \sin \theta = n \lambda$$
$$1 = \sin \theta_{\text{MAX}} = n_{\text{MAX}} \lambda / a$$

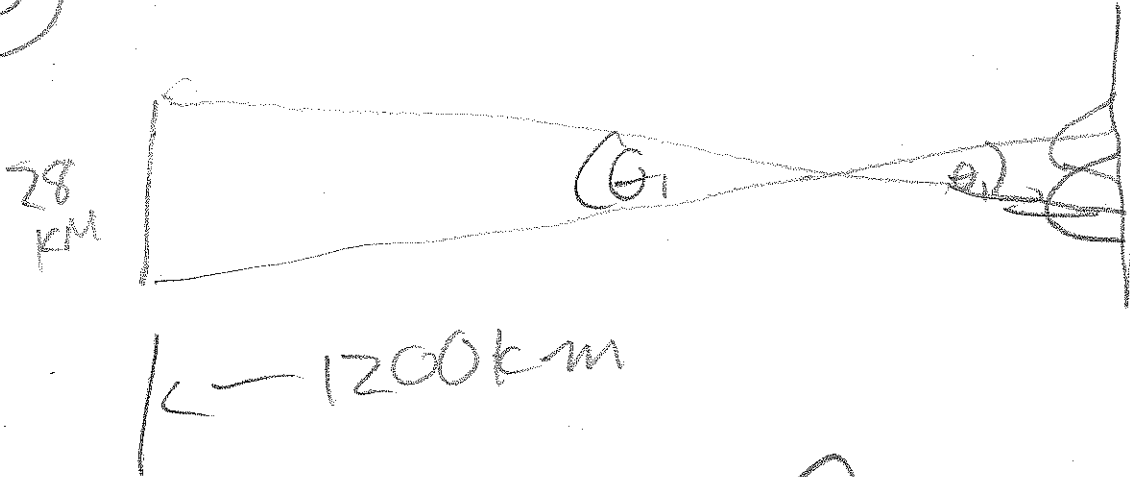


NOTE:

$$\sin \theta \approx \frac{y_m}{L}$$

$$a \frac{y_m}{L} = n \lambda$$

(43)



$$\sin \theta_1 = \frac{1.22 \lambda}{D}$$

Please write  
Quiz scores

Q1, Q2