PH 2502 **Term B 2017**
Lasers **R.S. Quimby**

STUDY GUIDE 1

Readings:

Chapter 1	**Overview of topics in photonics, showing how the subject of lasers fits into the broader area of photonics**
Chapter 2	**Review of optics, for those with no prior optics background**
Chapter 15	**This chapter is concerned with the essential nature of laser light, known as coherence. This is the property of laser light that is responsible for its many applications.**

Homework #1 (due Oct. 31):

Ch. 2: problems 3, 4, 7, 9

Ch. 15: problems 3, 5, 6 (assume the Ar laser has perfect spatial coherence)

Figure for prob. 2.3

Find range of angles θ_1 such that TIR occurs at the top (horizontal) water/air interface shown

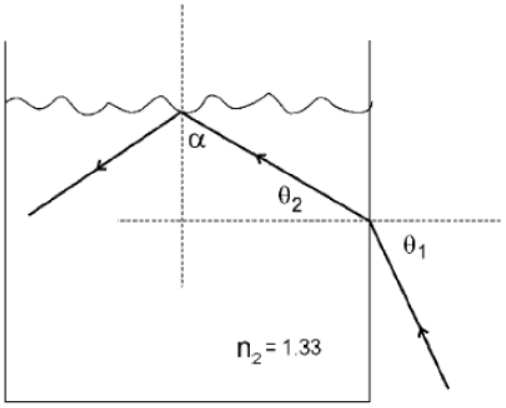
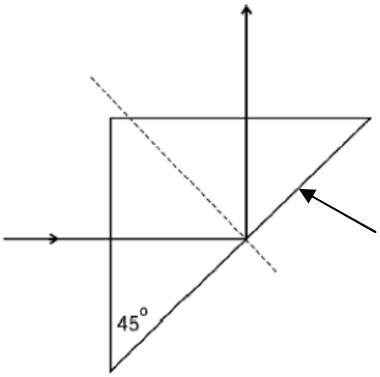


Figure for prob. 2.9



TIR at this interface