University of California, Berkeley
Physics 7C Spring 2002

Problem Set 2
due Feb. 7, 2003

Reading assignment: Giancoli, chapter 33.

1. Giancoli, problem 13
2. (Giancoli, problem 15 variant) Consider a concave mirror pointed at the sun which focusses the Sun's rays 12 cm in front of the mirror. What is the radius of the spherical surface from which the mirror was made?
3. Giancoli problem 19.
4. Giancoli, problem 23.
5. (Giancoli, problem 36 variant) Light is incident on an equilateral glass prism at a 45.0 degree angle to one face, fig 33-46 in Giancoli. Calculate the angle at which light emerges from the opposite face, assuming that n = 1.25.
6. (Giancoli, problem 37 variant) Take the flashlight to be shining from 2.6m above the water level instead of 1.3 m.
7. Giancoli, problem 60.
8. Giancoli, problem 63.
9. Giancoli, problem 68.
10. Giancoli, problem 70.

Please show your work so that the grader can give you credit for effort even if you get the wrong answer. For keeping track of your own work it is usually helpful to only plug in numbers at the end. Also, please try to make your work readable!