

Fall, 2009

MATH 3500(H)
PROBLEM SET #8

T. Shifrin

DUE Wednesday, October 14, 2009.

Problems to work but not hand in:

§3.5: #7a,b, 8a.

§3.6: #2, 3a.

§4.1: #2, 3b,f, 8, 9.

Problems to turn in:

WeBWork Homework 8

§3.5: #2 (2), 4(3), 5 (3), 6 (3), 8b (3), 10 (2).

§3.6: #1 (3), 4 (2).

§4.1: #3d (2).

A. Find all the unit vectors $\mathbf{x} \in \mathbb{R}^3$ that make an angle of $\pi/4$ with $\begin{bmatrix} 1 \\ 0 \\ 1 \end{bmatrix}$
and an angle of $\pi/3$ with $\begin{bmatrix} 0 \\ 1 \\ 0 \end{bmatrix}$.

Challenge problems (Turn in separately):

§3.5: #14 (4), 15 (6), 16 (2).

§3.6: #7* (4), 8 (1), 9 (2), 11 (3).

*Particularly recommended for physics or engineering majors.