

Fall, 2009

MATH 3500(H)
PROBLEM SET #2

T. Shifrin

DUE Wednesday, September 2, 2009.

Problems to work but not hand in:

§1.3: #7, 8.

§1.4: #5b,e, 8, 12, 13, 17, 19, 24, 27, 31.

Problems to turn in:

WeBWork Homework 2

Log in at

https://webwork.math.uga.edu/webwork2/Math3500_Shifrin_F09/
using your UGAMyID as your username and all but the last digit of your 810 number, formatted as 810-xx-xxxx, as your password. You can make up a different password if you like. If you get a message about a security certificate, you can read about this on our course homepage

<http://www.math.uga.edu/~shifrin/MATH3500.html>

You can try each problem as many times as you want (for now); answers will be available shortly after the homework is due. Note that the WeB-Work homework is due Sunday evening. *Half* your WeBWork score will be added to your written homework grade.

§1.3: #9 (2), 10 (2).

§1.4: #2 (2), 3 (3), 10 (3), 15 (3), 29 (2), 30 (2), 36 (3).

A. (3) Suppose A is a square matrix satisfying the equation $A^3 - 2I = O$. Prove that A and $A - I$ are both invertible. (Hint: Give explicit formulas for their inverses.)

Challenge problems (Turn in separately):

§1.3: #12 (3).

§1.4: #37 (3).