Due date:
Friday, 2/12, **due 6pm, submit through Canvas**.

Instructions:
Students are encouraged to work together and discuss the homework problems, however each student must write up the solutions in their own words. Homework solutions should be well-explained, except True/False questions unless requested otherwise.

The format of HW is not restricted, but the PDF file is the preferred one.

Problem 1: Let A, B be 3×3 matrix. If $\det(3AB^2) = 108$ and $A = \begin{pmatrix} 1 & 1 & 1 \\ 0 & 2 & 2 \\ 0 & 0 & 1 \end{pmatrix}$.

Find $\det(B)$.

Problems in [1]
Pages 44–45, problems 1.6.3
Pages 47–48, problems 1.6.17(c), 1.6.19, 1.6.20, 1.6.21, 1.6.25(c)
Pages 65–66, problems 1.8.2(e), 1.8.7(g,i)
Page 73, problems 1.9.1(b), 1.9.4(c,e,g,h) [1.9.4: No justification is needed], 1.9.5
(For 1.9.4 (e) and 1.9.5, suppose those matrices S, A, B are all square matrices.)

References

[1] Peter Olver and Chehrzad Shakiban, Applied Linear Algebra, 2nd Edition