Due date:
Friday, 3/5, **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.

Problems in [1]:
Pages 132–133, problems 3.1.4(c), 3.1.8, 3.1.12, 3.14, 3.1.16

(Note that for 3.1.12(b), we want to find the inner product $\langle \mathbf{u}, \mathbf{v} \rangle$ on $\mathbb{R}^2$, provided that we have known the corresponding norm defined by $\|\mathbf{v}\| = \sqrt{v_1^2 - 3v_1 v_2 + 5v_2^2}$. Hint: using (a) to find this inner product.)

Pages 135–136, problems 3.1.21(a,b), 3.1.23(b,c), 3.1.25
Pages 139–140, problems 3.2.5(b, also find the angle between the vectors $\mathbf{v}, \mathbf{w}$), 3.2.13(a,c)

References

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