Homework 4

Use the pdf problem set posted to the website, as the numbering differs from that of the text.

Recitation (ungraded; attempt these, then come see some solutions worked out in the recitation)

(1) DMC Problem 8.7
(2) DMC Problem 8.10
(3) DMC Problem 8.17
(4) DMC Problem 9.45 (a) (c)
(5) DMC Problem 9.47
(6) DMC Problem 9.48
(7) DMC Problem 9.40 (a) (c)

Problems (Submit solutions)

Show your work and explain your reasoning. Write in complete and grammatically sound sentences, and submit legible work. The numbers in square brackets are the amount of points each problem is worth.

(1) [**10**] DMC Problem 8.9
(2) [**10**] DMC Problem 8.16
(3) [**10**] DMC Problem 8.18 (b)
(4) [**10**] DMC Problem 8.27 (a)
(5) [**10**] DMC Problem 8.31 (a) (you will need to know how to multiply 2×2 matrices and that $\det\left(\begin{bmatrix} a & b \\ c & d \end{bmatrix}\right) = ad - bc$, and you will find the fact that $\det(AB) = \det(A)\det(B)$ for any two matrices A and B to be useful.)
(6) [**10**] DMC Problem 9.3 (f) (k) (l)
(7) [**10**] DMC Problem 9.9
(8) [**10**] DMC Problem 9.22
(9) [**10**] DMC Problem 9.38 (the submatrix consisting of columns (a) and (c) and rows (i) and (iv))
(10) [**10**] DMC Problem 9.49