

Page (Section)	(Updated April 6) This page is accessible from the course website https://sites.camosun.ca/raymondlai/home-2/courses/math-251/
129 (9.17)	#1(a) Answer should be $Q = \begin{bmatrix} -\sqrt{2}/2 & \sqrt{2}/2 \\ \sqrt{2}/2 & \sqrt{2}/2 \end{bmatrix}, D = \begin{bmatrix} -1 & 0 \\ 0 & 5 \end{bmatrix}$
114 (9.14)	#4(c) Signs of entries of matrices in answers are off; answer should be $A^{-1} = \frac{1}{-4} \begin{bmatrix} -4 & 4 & 0 & 0 \\ 0 & 2 & -2 & 0 \\ 0 & -4 & 0 & 4 \\ 2 & 0 & 0 & -4 \end{bmatrix} = \begin{bmatrix} 1 & -1 & 0 & 0 \\ 0 & -1/2 & 1/2 & 0 \\ 0 & 1 & 0 & -1 \\ -1/2 & 0 & 0 & 1 \end{bmatrix}$
105 (8.13)	#8(f) Skip this exercise.
51 (4.6)	#7(c) $A^{-1} = \begin{bmatrix} 1/4 & -1/4 & 1/4 \\ 7/8 & -5/8 & 1/8 \\ -3/2 & 3/2 & -1/2 \end{bmatrix}; x = \frac{1}{2}, y = \frac{3}{4}, z = -2$
43 (4.5)	#11 $A^T C^T = \begin{bmatrix} 1 & 13 \\ 10 & 7 \end{bmatrix}$
28 (3.3)	#8(b) Answer should be 12 cubic units
27 (3.3)	#1(a) Answer should be $\frac{19}{5}, -\frac{14}{5}$
14 (2.2)	Ignore question #9(a) [If you solve this challenging exercise, your answer should be $x = \frac{1137}{1898} - \frac{399}{1898}i, y = -\frac{291}{949} - \frac{922}{949}i$ Ignore question #9(b) [If you solve this challenging exercise, your answer should be $x = \frac{6}{5} + \frac{9}{10}i, y = \frac{3}{25} - \frac{57}{50}i$
13 (2.2)	Ignore question #6(b) [If you solve this challenging exercise, your answer should be $x = -\frac{644}{845} + \frac{888}{845}i, y = -\frac{72}{845} - \frac{646}{845}i$