

EART 111
Mathematics in the Earth Sciences
Fall 2007 Syllabus
Suggested Problems
K=Kreyszig (8th ed.) S=Stewart (5th ed.)

Topic	Sections	Problems
Vectors	S12.1	1,5,9,11,13,15,21
	S12.2	1,3,7,9,11,13,19,21,25,32
	S12.3	1,3,5,11,13,19,21,25,47,51
	S12.4	1,3,5,9,11,19,21,25,31
	S12.5	1,3,5,7,11,13,15,19,21,23,27,31,51,55
Partial Derivatives	S14.1	1,3,31,33,41,57,59-64
Derivatives	S14.3	1,3,5,7,11,17,19,21,31,49,51,53,55,57,59,63,75,77,79,87,89
	S14.4	1,3,11,13,19,29
	S14.5	1,3,5,7,9,11,17,25,28,45
	S14.6	1,3,5,7,9,11,17,25,28,45
	S14.7	1,3,5,13,35,37,51
Matrices	K6.2	1,3,5,7,9,11
	K6.3	1,3,5,7,11,15
	K6.6	5,7,9
	K6.7	1,3,5,7,15,17,19
Eigenvalues	K7.1	1,3,9,11
	K7.2	1,3,5
DE's	K1.1	Odd problems 1-29
	K1.2	1,3,5,7,13,17,21,23,25
	K1.3	All are good!
	K1.6	3,7,9,11,15,17
HLDE's	K2.1	1-7,13,17,23,25,27,31,33,35
	K2.2	1,3,5,7,9,17,19,23
	K2.3	1,3,5,7,9,11,17,19