

Homework Sheet

Chapter 10 - Vectors and the geometry of space		
approximately 4 weeks (including one review for Test 1)		
Section	Problems	Notes
10.1	online: 3, 4, 10, 13, 27, 31.	
	not-online: 1, 2, 7, 15, 21, 23, 33, 35.	
10.2	online: 5, 7, 9, 11, 13, 15, 17, 18, 24, 28, 34	
	not-online: 2, 3, 4, 10, 12, 18, 21, 22, 33.	
10.3	online: 1, 2, 5, 7, 9, 15, 16, 19, 21, 31, 32, 37, 39	
	not-online: 6, 10, 11, 14, 17, 29, 33, 34, 43.	
10.4	online: 1, 3, 11, 13, 16, 17, 19, 27, 29, 33, 37, 40	
	not-online: 2, 5, 7, 9, 15, 20, 31, 34, 38, 39	
10.5(a)	online: 1, 2, 4, 5, 7, 8, 11, 14, 17, 42, 43	Homework broken into 2 parts. (a)-lines and (b)-planes
	not-online: 3, 9, 10, 13, 15, 18, 19, 44, 46	
10.5(b)	online: 23, 25, 26, 27, 29, 35, 39, 40, 47, 51	
	not-online: 21, 31, 33, 37, 41, 45, 49	
10.6	online: 1, 3, 4, 9, 11, 12-16, 23, 25, 27	
	not-online: 5, 7, 17, 19, 21, 24, 26, 29, 30	
10.7	online: 1, 3, 5, 7, 17, 21, 25, 28, 39-41, 49, 59, 60, 62	Skip using computers to draw space curves
	not-online: 9, 11, 19, 23, 27, 29, 43, 51, 61, 67.	
10.8	online: 1, 2, 3, 39, 41	Skip curvature.
	not-online: 4, 40, 42.	
10.9	online: 1, 8, 10, 13(a), 15, 19, 20, 21, 27	Skip tangential and normal components of acceleration and Kepler's laws.
	not-online: 3, 5, 7, 9, 24, 25	
Chapter 11 - Partial Derivatives		
approximately 4 weeks (including one review for Test 2)		
Section	Problems	Notes
11.1	online: 5, 8, 11, 13, 15, 25, 29, 33, 41-47	
	not-online: 1, 3, 7, 17, 22, 23, 24, 31, 49	
11.2	online: 4, 5, 9, 12, 19, 20, 21, 23	
	not-online: 7, 11, 22, 25	
11.3	online: 3, 5, 6, 8, 9, 14, 23, 25, 32, 39, 43, 45, 55	Skip partial differential equations.
	not-online: 1, 7, 11, 13, 15, 21, 31, 33, 41, 47, 51, 53, 57	
11.4	online: 3, 6, 11, 19, 27, 30	
	not-online: 1, 5, 13, 17, 39	
11.5	online: 1, 4, 7, 9, 11, 17, 32, 33	Skip implicit differentiation
	not-online: 2, 3, 5, 13, 15, 19, 34, 35	
11.6	online: 3, 7, 11, 15, 21, 24, 32, 42	
	not-online: 1, 5, 9, 13, 17, 23, 25, 31, 33, 35, 43	
11.7	online: 7, 11, 25, 28, 34, 37, 43	
	not-online: 1, 2, 5, 9, 13, 23, 35,	
11.8	online: 2, 3, 5, 7, 17, 30	Skip two constraints.
	not-online: 1, 9, 19, 31, 37	

Chapter 12 - Multiple Integrals

approximately 3 1/2 weeks (including one review for Test 3)

Section	Problems	Notes
12.1	online: 1, 7, 8, 12, 15, 17, 24, 29, 35	Skip midpoint rule.
	not-online: 3, 9, 11, 13, 19, 21, 23, 31, 34	
12.2	online: 1, 3, 7, 9, 11, 15, 17, 19, 21, 24, 37, 41, 43.	
	not-online: 5, 13, 23, 27, 39, 45, 49	
12.3	online: 1, 3, 9, 13, 14, 17, 21, 23, 25.	
	not-online: 2, 4, 5, 7, 11, 15, 19, 24, 26,	
12.4	online: 5, 7, 10, 11, 12	Skip moments of inertia.
	not-online: 3, 9, 13, 15	
12.5	online: 5, 6, 7, 11, 13, 15, 17, 25, 29, 31, 37	
	not-online: 9, 10, 14, 19, 26, 27, 33, 39	
12.6	online: 3, 5, 8, 11, 17, 20, 23, 27, 29	
	not-online: 1, 2, 4, 6, 7, 9, 13, 15, 19, 21, 30	
12.7	online: 1, 3, 5, 9, 13, 15, 17, 20, 21, 23, 27	
	not-online: 2, 4, 6, 7, 8, 11, 19, 25, 29, 37	
12.8	online: 1, 7, 9, 15, 17, 23	
	not-online: 3, 8, 16, 19, 25	

Chapter 13 - Vector Calculus

approximately 2 1/2 weeks (including two reviews for final exam)

Section	Problems	Notes
13.1	online: 1, 5, 7, 13, 15, 25	
	not-online: 11, 12, 14, 16-18	
13.2	online: 1, 3, 5, 7, 9, 17, 19, 21	
	not-online: 6, 11, 13, 15, 18, 22	
13.3	online: 1, 3, 5, 7, 9, 17, 20, 21	Skip conservation of energy
	not-online: 4, 8, 13, 18, 31	
13.4	online: 5, 7, 9, 13, 17	
	not-online: 1, 3, 6, 11, 18	