

Written Homework Assignments

Refer to Learning Suite for the due dates. The following problems are numbered according to the 9th Edition of the textbook "Multivariable Calculus" by Stewart, Clegg, and Watson.

Each "M" problem is optional. If you do it using Mathematica (writing the Mathematica command and picture, if applicable, in your homework), you will get 2 bonus points. You won't get the bonus point if you use a different software. See the next page for an example.

HW #	Section	Pages	Problems
1	12.1	835-836	13a, 16, 19, 33, 44
	12.2	843-846	2, 10, 19, 20, 24
	12.3	852-854	4, 16, 19, 25, 41, 61
2	12.4	861-863	4, 19, 28, 37
	12.5	872-874	4, 9, 20, 23, 28, 37, 51
3	12.6	881-883	4(M), 21-30, 48
	13.1	895-898	1, 4, 16(M), 21, 25-30, 39
4	13.2	902-904	4(M), 9, 13, 18, 25, 38, 43, 55
5	13.3	913-916	5, 9(M), 24, 26, 35, 42, 43
6	13.4	923-925	9, 12, 16, 18(M), 19, 22, 39, 40
	MT1 Review	Sections 12.1-13.4	Review HW and WebAssign problems
7	14.1	946-949	12, 21, 25, 28, 32, 38, 52(M)
8	14.2	960-961	5, 9, 18, 29, 33, 34, 45, 51
9	14.3	969-973	4, 5, 9, 18, 25, 41, 42, 47, 54, 59, 83, 95
10	14.4	981-983	4, 9, 12(M), 19, 24, 31, 34, 52
11	14.5	991-994	1, 3, 6, 13, 14, 19, 26, 27, 32, 33, 43, 51
12	14.6	1005-1008	10, 13, 16, 23, 29, 31, 40, 56(M)
13	14.7	1016-1019	5, 10, 15, 25(M), 34, 35, 45, 46, 54
14	14.8	1026-1028	2(M), 14, 30, 31, 39, 40
15	15.1	1049-1051	18, 20, 27, 32, 45, 49, 52(M)
16	15.2	1059-1062	12, 19, 23, 25, 31, 36, 61, 63, 71, 74
17	15.3	1067-1069	1-6, 9, 14, 25, 29, 32, 39, 43(M), 45
18	15.6	1092-1095	1, 3, 13, 17, 20, 24, 27(M)
	MT2 Review	Sections 14.1-15.6	Review HW and WebAssign problems
19	15.7	1100-1101	4, 11(M), 19, 23, 26, 32
20	15.9	1116-1117	1, 2, 9, 14, 19, 20, 22(M), 26, 27
21	15.8	1106-1108	17, 25, 26, 32, 38, 42(M)
22	16.1	1129-1131	3, 13-18, 28, 29, 31-34, 36(M)
23	16.2	1141-1143	2, 7, 16, 22, 23, 30(M), 31a
	16.3	1151-1153	6, 9, 20, 21, 35, 41
24	16.4	1159-1161	1, 8, 13, 16, 20(M), 25
25	16.5	1168-1170	6, 7, 15, 18, 23, 25-28
26	16.6	1180-1182	1, 13-18, 23, 24, 33, 34, 39, 41, 44
27	16.7	1192-1194	14, 23, 26, 27, 34(M), 45
28	16.8	1199-1201	1, 4, 5, 7, 9, 16bc(M), 19, 22, 23
	Final Review	Sections 15.7-16.8	Review HW and WebAssign problems

Example of an “M” problem

[7](#), [8](#), [9](#), [10](#), [11](#), [12](#), [13](#), [14](#), [15](#), and [16](#) Sketch the curve with the given vector equation. Indicate with an arrow the direction in which t increases.

7. $\mathbf{r}(t) = \langle -\cos t, t \rangle$

Solution: We use the command ParametricPlot to sketch the curve.

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In[2]:= ParametricPlot[{-Cos[t], t}, {t, 0, 10}]
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