

MATH 243: Multivariable Calculus

Last Updated: November 23, 2015

Suggested Homework Problems from McCallum et.al., *Multivariable Calculus*, 6th Edition

Guidelines: Homework is regularly assigned by not collected. Do it promptly. Keep a separate homework notebook. I strongly recommend you doing all odd problems regardless weather they are assigned or not.

Your solutions should always include reasoning. This helps reinforce logical structure and trains you in critical thinking. Write clearly. Do not put an equals sign between unequal quantities, or quantities you have not yet proved are equal. Use words like “hence”, “therefore” to connect statements or equations, and indicate the chain of reasoning. Interpret your answers. Use “we are given”, “we want to show that” to distinguish clearly between what is given and what is to be found. Practice writing *complete solutions* early since you will be expected to do so on the exam.

§12.1.	p.671	1, 2, 3, 4, 6, 7, 9, 10, 11, 13, 18, 20, 21, 22, 24, 27, 28, 35.
§12.2.	p.678	2, 3, 4, 5, 7, 8, 11, 12, 13, 15, 16, 17, 19.
§12.3.	p.688	1, 2, 3, 4, 5, 7, 8, 9, 11, 14, 16, 17, 28.
§12.4.	p.697	1, 2, 3, 5, 7, 8, 9, 10, 13, 21, 22, 23, 25, 31.
§12.5.	p.703	1, 2, 3, 4, 5, 6, 7, 12, 15, 25.
§12.6.	p.708	*** No assigned homework ***

§13.1.	p.725	1, 2, 3, 5, 6, 7, 9, 11, 15, 17, 21, 25, 27, 28, 30, 31, 32, 37.
§13.2.	p.732	6, 7, 9, 10, 11, 13, 15, 17, 25, 42.
§13.3.	p.740	1, 3, 5, 6, 7, 11, 13, 15, 17, 19, 21, 22, 23, 25, 27, 33, 39, 43, 47.
§13.4.	p.749	1, 3, 5, 7, 13, 14, 15, 20, 23, 29, 30, 33.

§14.1.	p.762	1, 3, 4, 5, 6, 7, 8, 10, 11, 13, 14, 15.
§14.2.	p.768	2 – 27 (all), 30 – 32 (all) , 39, 40, 49.
§14.3.	p.777	2, 3, 5, 11, 13, 17, 21, 22, 25.
§14.4.	p.785	1, 5, 7, 9, 15, 19, 23, 25, 27, 30, 32 – 37, 51, 74.
§14.5.	p.793	3, 5, 17, 18, 19, 21, 25, 28, 30, 33, 57, 58.
§14.6.	p.803	3, 7, 11, 16, 17, 19, 21, 25 + 94 (on page 825).
§14.7.	p.812	1, 3, 15, 23, 27, 41.
§14.8.	p.820	*** No assigned homework ***

§15.1. p.837 1, 3, 4, 5, 9, 12, 15, 17, 21, 25, 32, 33.
§15.2. p.845 *** No assigned homework ***
§15.3. p.855 *** Read only ***

§16.1. p.873 1, 7, 9, 11, 17, 19, 21, 25.
§16.2. p.881 1, 3, 5, 7, 11, 13, 15, 16, 17, 19, 28, 30, 33, 34, 39, 40, 43, 45, 46, 48, 50.
§16.3. p.887 1, 2, 5, 7, 9, 11, 13, 31, 32, 37, 39, 41, 42, 43, 50. (EXAM #2)
§16.4. p.891 1, 2, 3, 4, 9, 11, 12, 19, 21, 29.
§16.5. p.901 1, 3, 4, 5, 9, 11, 19, 20, 21, 22, 23, 73, 74.
§16.6. p.909 *** No assigned homework ***

§17.1. p.923 1 – 7, 9, 11, 13, 18, 19, 23, 25, 27, 33, 35, 39, 40.
§17.2. p.933 1, 3, 5, 7, 9, 11, 13, 14, 26, 28.
§17.3. p.941
§17.4. p.948 *** No assigned homework ***

§18.1. p.964
§18.2. p.972
§18.3. p.980 *** TBD (time permitting) ***
§18.4. p.993 *** TBD (time permitting) ***

END
