

Exercises for Spring 2024 MATH 2301 Sections 100 & 110 (Ntiamoah) and 120 (Barsamian)

(from Stewart Essential Calculus Early Transcendentals 2nd Edition)

Your goal should be to write solutions to all of the 362 exercises in this table.

Section	Exercises (<u>Underlined</u> exercises are <u>not</u> in WebAssign.)																Total	
1.3 The Limit of a Function	1	5	7	<u>10</u>	11	12	<u>13</u>	15	16								9	
1.4 Calculating Limits	5	7	10	11	17	21	23	25	27	31	33	35	38	42	49	51	55	17
1.5 Continuity	3	5	7	<u>17</u>	19	27	33	39	43	47							10	
1.6 Limits Involving Infinity	1	5	7	9	10	13	19	21	25	29	33	35	40	41	45	49		16
2.1 Derivatives & Rates of Change	1	5	7	<u>9</u>	11	15	16	18	25	27	29	31	33	35	43	47		16
2.2 The Derivative as a Function	1	3	5	9	11	13	19	20	22	23	25	33	35	39				14
2.3 Basic Differentiation Formulas	1	7	9	11	13	19	<u>27</u>	29	31	33	35	37	39	45	50	57	69	17
2.4 The Product & Quotient Rules	3	5	7	13	16	17	19	21	26	27	31	34	37	41	51	<u>55</u>		16
2.5 The Chain Rule	1	7	13	14	17	21	25	35	43	47	51	55	63	64				14
2.6 Implicit Differentiation	5	7	9	11	13	19	21											7
2.7 Related Rates	4	5	11	13	15	20	23	25	27	28	31							11
2.8 Linear Approx & Differentials	1	5	6	11	13	17	19	21	23									9
3.1 Exponential Functions	1	5	7	9	13	15	16	17	<u>23</u>	<u>24</u>	<u>25</u>	27	29	30				14
3.2 Inverse Functions, Logarithms	5	7	9	11	15	17	18	22	23	25	35	36	<u>39</u>	67	71	76		16
3.3 Derivs of Log. & Exp. Funct.	1	3	4	6	13	20	26	31	35	41	45	55	57					13
3.4 Exponential Growth & Decay	1	2	3	9	13	16												6
3.5 Inverse Trig Functions	1	2	3	5	6	9	17	19	21									9
3.7 L'Hospital's Rule	1	2	3	4	18	21	25	26	31	35								10
4.1 Maximum & Minimum Values	5	9	18	19	21	25	29	35	39	43	47	49						12
4.2 The Mean Value Theorem	1	3	5	7	9	11	13	15	17	23	25							11
4.3 Derivs. & Shapes of Graphs	1	5	7	8	<u>10</u>	13	15	19	23	27	35	37	45					13
4.4 Curve Sketching	1	9	11	13	15	19	31	33	<u>39</u>									9
4.5 Optimization Problems	2	7	<u>9</u>	11	12	15	17	22	25	26	28	30	37	39				14
4.6 Newton's Method	4	7	9	11	13													5
4.7 Antiderivatives	1	2	7	12	13	15	20	27	38	40	43	47	53	55				14
5.1 Areas and Distances	2	3	4	5	9	13	16	18										8
5.2 The Definite Integral	1	3	9	11	15	25	30	<u>31</u>	33	35	39	40	44					13
5.3 Evaluating Definite Integrals	3	7	11	18	26	29	35	51	56	59	61	65	69					13
5.4 The Fund. Thm. of Calculus	1	3	5	6	10	11	15	19	25	27								10
5.5 The Substitution Rule	7	11	13	17	19	23	26	27	33	37	39	44	50	53	55	61		16
Total Number of Exercises From All Sections:																	362	

A Suggestion for Studying: Even though WebAssign does not require that you write stuff down, you will learn a lot by focusing on your *writing*. Furthermore, having good writing skills will really help when working on a written Quiz or Exam. Therefore, you should write down a complete solution to each problem *before* you type the answer into the answer box in WebAssign. Focus on the clarity and correctness of your written solution. Keep your written work organized in a notebook. Compare your written solutions to your Instructors' written solutions in Lectures and Recitations. Find another student, or a tutor, or the Recitation Instructor, or your Professor to look over your written work with you.