MATH 1060
Homework Problems
Spring 2020
Briggs Calculus, Early Transcendentals (3e)

Section	Topic	Problems *Note: underlined problems are not in MyLab Math.*
1.3	Inverses, Exponentials, Logarithms	1, 3, 5, 9, 12, 15, 17, 18, 21, 22, 23, 27, 29, 32, 33, 46, 49, 53, 57, 59, 71, 74, 78, 92
1.4	Trig and Inverse Trig Functions	1, 14, 15, 16, 17, 20, 21, 23, 29, 35, 40, 42, 51, 55, 57, 61, 70, 75, 79, 89, 93, 104
2.1	The Idea of Limits	AR (2), 1, 9, 13, 17, 24, 26, 28, 31, 32
2.2	Definitions of Limits	AR (1), 2, 3, 6, 7, 15, 17, 19, 20, 23, 28, 29, 33, 35, 43, 46, 51
2.3	Limit Techniques	AR (4), 3, 7, 11, 12, 14, 17, 19, 23, 25, 29, 33, 37, 39, 41, 47, 53, 56, 73, 75, 81, 85, 90, 93, 95, 100, 105
2.4	Infinite Limits	AR (2), 3, 5, 6, 9, 11, 13, 17, 21, 27, 33, 35, 37, 42, 45, 50, 51, 54, 57, 61, 65
2.5	Limits at Infinity	AR (1), 7, 9, 11, 12, 13, 17, 22, 29, 37, 40, 41, 43, 47, 51, 55, 59, 61, 63, 65, 69, 71, 75, 81, 86
2.6	Continuity	AR (1), 2, 7, 9, 13, 15, 19, 21, 23, 30, 32, 39, 43, 47, (2.3.27), 49, 51, 53, 65, 67a, 71a, 85, 87, 88, 93, 95, 99
2.7	The Precise Definition of the Limit	2, 5, 10, 12, 19, 20, (2.4.23), 21, 22, 49
3.1	Intro to the Derivative	AR (3), 5, 13, 15, (2.5.20), 21, 25, 27, 29, 31, 35, 37, 41, (2.5.77), 44, 51, 52, 57, 60
3.2	The Derivative as a Function	AR (3), 1, 7, 8, 15, 17, (2.6.28), 19, 29, 35, 37, 39, 41, 43, (2.6.57), 45, 47, 48, 49, 51, 54, 55, 60, 62, 63, 66, 71, 73, 77
3.3	Differentiation Rules	AR (1), 4, 5, 11, 14, 21, 28, 29, 33, 35, (2.3.33), 44, 47, 49, 51, 57, 61, 63, 67, 68, 72, 78, 79, 80, 81, 82, 85, 91
3.4	Product and Quotient Rules	AR (3), 1, 2, 10, 11, 16, 20, 21, 22, 24, 25, 29, 37, (2.4.27), 39, 41, 43, 48, 53, 56, 63, 65, 71, 73, 74, 78, 81, 92
3.5	Trigonometric Derivatives	AR (2), 1, 8, 12, 13, (3.2.25), 14, 16, 21, 23, 25, 29, 31, (2.5.17), 37, 40, 43, 44, 48, 50, 54, (2.5.75), 55, 59, 66, 70, 72, 78, 79
3.6	Derivatives as Rates of Change	6, 18, 19, 25, 29, 31, (2.6.51), 35, 36, 39, 55, 57
3.7	Chain Rule	AR (2), 2, 10, 17, 20, 23, 25, 27, 29, 32, 33, 35, 37, (3.4.19), 40, 41, 42, 44, 48, 49, 59, 63, 66, 70, 73, 75, (3.4.27), 77, 86, 89, 93, 95, 98
3.8	Implicit Differentiation	1, 5, 11, 13, (3.5.41), 17, 18, 25, 27, 31, 32, 34, 39, 41, 42, 46, 50, 55, 61, 63, 65, 73, 78

3.9	Derivatives of Logs and Exponentials	AR (2), 3, 5, 16, 19, 23, 27, 29, 34, 36, 37, 40, 47, 53, (3.2.37), (2.3.25), 59, 64, 77, 79, 85, 91, 92, 105, 109
3.10	Derivatives of Inverse Trig Functions	AR (2), 1, 3, 13, 15, 18, (3.7.46), 21, 30, 31, 33, (2.4.35), 41, (3.7.55), 45, 62, 81, 89
3.11	Related Rates	3, 9, 10, 11, (3.4.53), 13, 15, 17, 19, 22, 25, (3.4.24), (3.8.33), 29, 33, 35, 39, (2.5.47), 41, 43, 47, 50, 51
4.1	Maxima and Minima	5, 9, 11, 14, 15, (2.6.30), 17, 19, 23, 31, 33, 35, 41, 43, 49, 52, (2.6.63), 53, 55, 63, 65, 75, (3.9.30), 77, (3.5.37), 78, 85, 87, 89
4.2	Mean Value, Rolle's Theorems	3, 5, 6, 7, 8, 11, 15, 18, 21, 25, 26, 29, 33, 36, 37, 39, 49, 50
4.3	What Derivatives Tell Us	6, 7, 9, 11, 17, 19, 25, 29, 31, 34, 40, 46, 47, 51, 54, 57, 59, 61, 63, 67, 73, 77, 83, 87, 90, 96, 99, 105, 107
4.4	Curve Sketching	3, 8, 11, 15, 25, 29, 33, 35, 37, 42, 45, 47, 55, 56, 57
4.5	Optimization	AR (4), 4, 7, 13, 15, 16, 17, 21, 22, (3.9.27), 25, 27, 31, 33, 37, 40, 49, 57
4.6	Linearization and Differentials	AR (2), 2, 3, 10, 15, 25, 29, 30, 33, (3.4.29), 38, 39, 41, 43, 48, 50, (3.4.37), 52, 55, 56, 59, 61, 64, 67, 69, 71
4.7	L'Hopital's Rule	AR (1), 3, 7, 17, 21, 22, 25, 37, 39, (3.5.29), 41, 45, 48, 52, 53, 57, 61, 65, (4.4.17), 69, 73, 75, 78, 79, 81, 85, 95, 100, 103, 119
4.9	Antiderivatives	AR (1), 4, (3.7.42), 9, 11, 13, 17, 19, 21, 22, 25, 27, 34, 35, (3.7.49), 40, 43, 57, 62, 69, 73, 79, 86, 87, 91, 93, 97, 107, 111, 112, 114, 120
5.1	Approximating Area Under Curves	AR (1), 1, 7, 9, 11, 13, 15, (4.3.40), 17, (4.3.47), 23, 37, 41, 44, 47, 49, 71, 73
5.2	Definite Integrals	AR (1), 2, 14, 16, 18, 28, 29, 35, 37, 41, 43, 45, 47, 53, 55, 57, 65, 79, 80, 81, 83, 90
5.3	Fundamental Theorem of Calculus	3, 9, 13, 14, 16, 19, (3.10.30), 23, 25, 33, 39, 42, 46, 47, 59, 64, 69, 71, 75, 85, 87, 94, 98, (4.9.45), 106, 111
5.4	Working with Integrals, Average Value	1, 2, 13, 18, 21, 23, 27, 29, 33, 34, 39, 47, 52
5.5	Substitution Method	AR (2), 1, 3, 6, 7, 10, 12 ,13, 17 ,19, 22, 23, 36, 43, 44, 45, 46, 48, 51, 59, 66, 69, 70, 73, 74, 78, 85, 97, 100

- Underlined problems are not assigned in MyLab Math, but are still important.
- Algebra review (AR) problems are only available online in MyLab Math.
- Problems in parenthesis are review problems from previous sections to help keep skills current and to prepare for upcoming exercises.
- This list should not be considered a complete listing of the skills expected on an exam. Students should expect exam questions which require a synthesis of these skills.