

### Math 163B Suggested Exercises for Spring 2009

| Section | Title  | Suggested Exercises  |
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| 6-1     | Antiderivatives and Indefinite Integrals     | 3, 5, 7, 9, 13, 15, 17, 19, 21, 23, 27, 29, 31, 43, 45, 49, 51, 53, 55, 61, 63, 67, 73, 75, 81, 89, 109, 111 |
| 6-2     | Integration by Substitution                  | 5, 7, 9, 11, 15, 17, 19, 21, 23, 25, 35, 37, 55, 56, 58, 73, 75  |
| 6-3     | Differential Equations; Growth and Decay     | 1, 3, 5, 7, 8, 9, 10, 11, 19, 21, 23, 25, 29, 31, 39, 40, 53, 55, 59, 64, 65, 67, 71, 72                     |
| 6-4     | The Definite Integral                        | 1, 3, 5, 7, 9, 17, 19, 21, 23, 25, 27, 29, 31, 35, 37, 39, 59  |
| 6-5     | The Fundamental Theorem of Calculus          | 3, 5, 7, 9, 11, 13, 15, 17, 19, 21, 25, 29, 31, 35, 37, 41, 43, 47, 61, 63, 67, 69, 81, 83, 84               |
| 7-1     | Area between Curves                          | 1, 3, 7, 11, 15, 19, 21, 25, 27, 29, 31, 41, 47, 51, 53, 61, 63, 81  |
| 7-2     | Applications in Business and Economics       | 1, 3, 5, 7, 9, 13, 17, 19, 21, 23, 25, 27, 29, 31, 35, 37, 39, 41  |
| 7-3     | Integration by Parts                         | 1, 3, 7, 9, 11, 13, 15, 17, 19, 21, 29, 33, 37, 39, 43, 47, 49, 59   |
| 8-1     | Functions of Several Variables               | 1, 5, 9, 11, 13, 17, 21, 22, 23, 25, 27, 31, 39, 40, 43, 45, 47, 49, 51, 53                                  |
| 8-2     | Partial Derivatives                          | 1, 3, 5, 9, 11, 13, 17, 19, 25, 27, 29, 31, 34, 75, 81, 91, 93, 97   |
| 8-3     | Maxima and Minima                            | 1, 3, 5, 7, 9, 11, 13, 17, 19, 21, 29, 35, 37  |
| 8-4     | Maxima and Minima Using Lagrange Multipliers | 1, 3, 5, 7, 9, 23, 25, 27, 28, 29  |