

## MA 165 Assignment Sheet

Fall 2021 (updated on Oct.7)

| Date    | Day | Lesson        | Topics, Sections to Cover                                 | Section # | due MLM HW          |
|---------|-----|---------------|---|-----------|---------------------|
| Aug.23  | M   | 1             | Exponential and Logarithmic Functions                     | 1.3       | due Thurs., Sept. 2 |
| Aug.25  | W   | 2             | Trigonometric Functions and Their Inverses                | 1.4       |                     |
| Aug.26  | Th  | Quiz 1        | covers Lessons 1, 2                                       |           |                     |
| Aug.27  | F   | 3             | Idea of limits, Definition of limits                      | 2.1, 2.2  |                     |
| Aug.30  | M   | 4             | Computing the limits                                      | 2.3       | Lessons 1,2,3       |
| Sept.1  | W   | 5             | Infinite limits, limits at infinity                       | 2.4, 2.5  | Lesson 4            |
| Sept.2  | Th  | Quiz 2        | covers Lessons 3,4,5                                      |           |                     |
| Sept.3  | F   | 6             | Continuity  | 2.6       | Lesson 5            |
| Sept.6  | M   | ×             | Labor Day   | ×         | ×                   |
| Sept.8  | W   | 7             | Introducing the Derivative                                | 3.1       | Lesson 6            |
| Sept.9  | Th  | Quiz 3        | covers Lessons 6, 7                                       |           |                     |
| Sept.10 | F   | 8             | Derivative as a function                                  | 3.2       | Lesson 7            |
| Sept.13 | M   | 9             | Rules of Differentiation                                  | 3.3, 3.4  | Lesson 8            |
| Sept.15 | W   | 10            | Derivatives of Trigonometric Functions                    | 3.5       | Lesson 9            |
| Sept.16 | Th  | ×             | Go over Study Guide for Exam 1                            |           |                     |
| Sept.17 | F   | 11            | Derivatives as Rate of Change<br>Chain Rule Part I        | 3.6, 3.7  | Lesson 10           |
| Sept.20 | M   | ×             | Review for Exam 1   | ×         | ×                   |
| Sept.21 | Tu  | <b>Exam 1</b> | <b>covers Lessons 1-9</b>                                 | ×         | ×                   |
| Sept.22 | W   | ×             | No Classes  | ×         | ×                   |
| Sept.23 | Th  | Quiz 4        | covers Lessons 8, 9, 10                                   |           |                     |
| Sept.24 | F   | 12            | Chain Rule Part II  | 3.7       | Lesson 11           |
| Sept.27 | M   | 13            | Implicit Differentiation                                  | 3.8       | Lesson 12           |
| Sept.29 | W   | 14            | Derivatives of Logarithmic and<br>Exponential Functions   | 3.9       | Lesson 13           |
| Sept.30 | Th  | Quiz 5        | covers Lessons 11, 12, 13                                 |           |                     |
| Oct.1   | F   | 15            | Derivatives of the Functions<br>of the form $f(x)^{g(x)}$ | 3.9       | Lesson 14           |
| Oct.4   | M   | 16            | Derivatives of the Inverse<br>Trigonometric Functions     | 3.10      | Lesson 15           |
| Oct.6   | W   | 17            | Related Rates, Part I                                     | 3.11      | Lesson 16           |
| Oct.7   | Th  | Quiz 6        | covers Lessons 14, 15, 16                                 |           |                     |
| Oct.8   | F   | 18            | Related Rates, Part II                                    | 3.11      | Lesson 17           |
| Oct.11  | M   |               | October Break   | ×         | ×                   |
| Oct.13  | W   | 19            | Maxima & Minima   | 4.1       | Lesson 18           |
| Oct.14  | Th  | ×             | Go over Study Guide for Exam 2                            |           |                     |
| Oct.15  | F   | 20            | Mean Value Theorem<br>What derivatives tell us Part I     | 4.2, 4.3  | Lesson 19           |
| Oct.18  | M   | ×             | Review for Exam 2   | ×         | ×                   |
| Oct.19  | Tu  | <b>Exam 2</b> | <b>covers Lessons 10-18</b>                               | ×         | ×                   |
| Oct.20  | W   | ×             | No Classes  | ×         | ×                   |
| Oct.21  | Th  | Quiz 7        | covers Lessons 17, 18, 19                                 |           |                     |
| Oct.22  | F   | 21            | What derivatives tell us Part II                          | 4.3       | Lesson 20           |
| Oct.25  | M   | 22            | Graphing Functions  | 4.4       | Lesson 21           |
| Oct.27  | W   | 23            | Optimization Problem, Part I                              | 4.5       | Lesson 22           |
| Oct.28  | Th  | Quiz 8        | covers Lessons 20, 21, 22                                 |           |                     |
| Oct.29  | W   | 24            | Optimization Problem, Part II                             | 4.5       | Lesson 23           |

MA 165 Assignment Sheet                      Fall 2021 (continued)

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|--------|-----|---------------|--|-----------|------------|
| Nov.1  | M   | 25            | Linear Approximation and Differentials               | 4.6       | Lesson 24  |
| Nov.3  | W   | 26            | L'Hospital's Rule                                    | 4.7       | Lesson 25  |
| Nov.4  | Th  | Quiz 9        | covers Lessons 23, 24, 25, 26                        |           |            |
| Nov.5  | F   | 27            | Antiderivatives                                      | 4.9       | Lesson 26  |
| Nov.8  | M   | 28            | Approximating the area under curves<br>(Riemann Sum) | 5.1       | Lesson 27  |
| Nov.10 | W   | ×             | Review for Exam 3                                    | ×         | ×          |
| Nov.11 | Th  | ×             | Go over Study Guide for Exam 3                       |           |            |
| Nov.11 | Th  | <b>Exam 3</b> | <b>covers Lessons 19-27</b>                          | ×         | ×          |
| Nov.12 | F   | 29            | Definite Integrals                                   | 5.2       | Lesson 28  |
| Nov.15 | M   | 30            | Fundamental Theorem of Calculus                      | 5.3       | Lesson 29  |
| Nov.17 | W   | 31            | Working with Integrals                               | 5.4       | Lesson 30  |
| Nov.18 | Th  | Quiz 10       | covers Lessons 27, 28, 29, 30                        |           |            |
| Nov.19 | F   | ×             | No Classes   | ×         | ×          |
| Nov.22 | M   | ×             | Thanksgiving Week                                    | ×         | ×          |
| Nov.24 | W   | ×             | Thanksgiving Week                                    | ×         | ×          |
| Nov.25 | Th  | ×             | Thanksgiving Week                                    | ×         | ×          |
| Nov.26 | F   | ×             | Thanksgiving Week                                    | ×         | ×          |
| Nov.29 | M   | 32            | Substitution Rules                                   | 5.5       | Lesson 31  |
| Dec.1  | W   | 33            | Exponential Models<br>(Growth & Decay)               | 7.2       | Lesson 32  |
| Dec.2  | Th  | Quiz 11       | covers Lessons 31, 32, 33                            |           |            |
| Dec.3  | F   | ×             | Reading Day, No Classes                              | ×         | Lesson 33  |
| Dec.6  | M   | ×             | Review for Final Exam                                | ×         | ×          |
| Dec.8  | W   | ×             | Review for Final Exam                                | ×         | ×          |
| Dec.9  | Th  | ×             | Review for Final Exam                                | ×         | ×          |
| Dec.10 | F   | ×             | Review for Final Exam                                | ×         | ×          |