



Note: The book is divided into three parts, F(First), M(Middle), L(last)

| <b>Title</b>  | <b>Section</b>                                | <b>Hours</b> |
|---|---|--------------|
| <b>Review of Differentiation</b>                          | <b>F3-4, F3-5, L11.6, F4-5</b>                | <b>4</b>     |
| <b>Extrema of a Function of a Single Variable</b>         | <b>F5-1</b>                                   | <b>2</b>     |
| <b>First Derivative Test and applications</b>             | <b>F5-1</b>                                   | <b>2</b>     |
| <b>Concavity and the Second Derivative Test</b>           | <b>F5-2</b>                                   | <b>2</b>     |
| <b>Applications I: Geometric Optimization</b>             | <b>F5-4.F5-5</b>                              | <b>3</b>     |
| <b>Applications II: Business and Economic Problems</b>    | <b>F5-6</b>                                   | <b>2</b>     |
| <b>Linearization and Differentials</b>                    | <b>F3-6</b>                                   | <b>2</b>     |
| <b>Inverse Functions</b>                                  | <b>Instructor's Notes</b>                     | <b>1</b>     |
| <b>Exponential Functions</b>                              | <b>F2-4</b>                                   | <b>2</b>     |
| <b><i>e</i></b>   | <b>F4-1</b>                                   | <b>1</b>     |
| <b>Derivative of Exponential Functions</b>                | <b>F4-2, F4-3, F4-4</b>                       | <b>2</b>     |
| <b>Logarithmic Functions and their Properties</b>         | <b>F2-5</b>                                   | <b>2</b>     |
| <b>Derivatives of Logarithmic Functions</b>               | <b>F4-2, F4-3, F4-4, F p255</b>               | <b>2</b>     |
| <b>Applications</b>                                       | <b>F p232 problems, F p250 problems, F4-7</b> | <b>2</b>     |
| <b>Antiderivatives</b>                                    | <b>F6-1</b>                                   | <b>2</b>     |
| <b>Applications of Antiderivatives</b>                    | <b>F6-1</b>                                   | <b>1</b>     |
| <b>Substitution (including by calculator)</b>             | <b>F6-2, F6-3</b>                             | <b>3</b>     |
| <b>Sigma Notation</b>                                     | <b>F B-1</b>                                  | <b>1</b>     |
| <b>Approximation of Areas</b>                             |   |              |
| <b>Definite Integral and Applications</b>                 | <b>F6-4, F6-5</b>                             | <b>4</b>     |
| <b>Substitution for Definite Integral (by calculator)</b> | <b>F6-5</b>                                   | <b>3</b>     |
| <b>Applications</b>                                       | <b>F7-1, F7-2</b>                             | <b>3</b>     |
| <b>Integration by parts</b>                               | <b>F7-3</b>                                   | <b>3</b>     |
| <b>Review</b>   |   | <b>3</b>     |
| <b>Exams</b>  |   | <b>3</b>     |
| <b>Total</b>  |   | <b>56</b>    |

The approximate hours per chapter are guidelines and are at the discretion of the instructor. The instructor is responsible for making assignments and scheduling examinations. The Final Exam date is scheduled by the Registrar.

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