**Calculus Honors Chapter 3 Homework Assignments**

In addition to these assignments, review worksheets and readings may be given. Please label each homework assignment with the assignment name, page(s) and problems.

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| **Assignment Name** | **Pages and Problems** | **Completed** |
| 3.1 A | p. 169-170 #1, 3, 7, 9, 17, 27, 37, 41 |  |
| 3.1 B | p. 169-170 #2, 5, 11, 15, 23, 33, 39, 63-66 |  |
| 3.2 A | Finish Worksheet from class **and**  p. 176-178 #29, 53, 55, 73-76 |  |
| 3.2 B | Finish review sheet for PA 3.1-3.2 |  |
| 3.3 A | p. 186 #1, 5, 9, 17, 25, 29, 33, 41 |  |
| 3.3 B | p. 186 #3, 11, 15, 23, 27, 35, 39, 45 |  |
| 3.3 C | p. 186 #10, 22, 28, 38, 42 |  |
| 3.3 D | p. 186-187 #6, 26, 30, 34, 61, 97-100 |  |
| 3.4 A | p. 195 #1, 5, 11-19 odd |  |
| 3.4 B | p. 195 #3, 9, 21, 27, 29, 31, 35, 37 |  |
| 3.4 C | Complete worksheet 3.4 (testing for concavity) |  |
| 3.1-3.4 Review A | p. 242 #6, 7, 10, 11, 12 & Multiple Choice worksheet |  |
| 3.1-3.4 Review B | Finish review worksheet |  |
| 3.6 A | p. 215 #9, 29 |  |
| 3.6 B | p. 215 #7 **(Hand In)** |  |
| 3.6 C | Work on Packet # 1-5 |  |
| 3.6 D | Work on Packet # 6-10 |  |
| 3.4 Graphs A | p. 196 #49, 51 & p. 186-187 #56, 57, 58, 62, 63 |  |
| 3.4 Graphs B | p. 216 #47-52 |  |
| 3.4 Graphs C | Worksheet |  |
| 3.4 Graphs D | Review sheet |  |
| 3.7 A | 3.7A #1-5 on Worksheet |  |
| 3.7 B | 3.7B #6-10 on Worksheet |  |
| 3.7 C | 3.7C #11-15 on Worksheet |  |
| 3.7 D | Review sheet |  |

**Big Ideas Learned in Chapter 3**

* Understand the definition of extrema on an interval.
* Understand the Extreme Value Theorem.
* Understand the definition of relative extrema of a function on an open interval.
* Understand and use the Mean Value Theorem and Rolle’s Theorem.
* Determine intervals on which a function is increasing or decreasing.
* Apply the 1st Derivative Test to find relative extrema of a function.
* Determine intervals on which a function is concave up or down.
* Find any points of inflection of the graph of a function.
* Apply the 2nd Derivative Test to find relative extrema of a function.
* Analyze and sketch the graph of a function using the 1st and 2nd derivative tests.
* Analyze and sketch the graph of a function given the sketch of the 1st or 2nd derivative of a function.
* Analyze and sketch the graph of a derivative of the function given the graph of the function.
* Solve Optimization problems (applied minimum and maximum problems) using the 1st and 2nd derivative tests.

**Topics I need to review before the Chapter Test:**