

Survey of Calculus
Homework Assignment Sheet 1

General Directions

- Always read and follow the directions on this assignment sheet - they may be different from the directions in the text.
- To receive full credit you must show adequate support work. If you are not sure what work to show, ask for clarification.
- On graphing problems, you should use the methods introduced in class to produce as accurate a graph as possible. Label the scale on each axis and give a t-chart with at least 5 key points (mins, maxes, zeros, inflection points).
- It is very important that you check your answers. Answers to odds are in the back of your text. You may use the instructor's textbook to check your answers to even problems.

Assignment 1

- 1.1 p. 106 **Use the numerical (Table) method to find the limits on 19 – 25. On problems 71 – 76, include with your support work an accurate sketch of the graph you see on your graphing calculator.**
6, 8, 10, 19, 20, 24, 25, 37, 38, 39, 42, 46, 49, 52, 58, 62, 71, 74, 76, 82, 88

Assignment 2

- 1.2 p. 117 4, 8, 15, 17, 20, 21, 24, 25, 29, 43, 45, 48, 53, 55, 58, 62, 63, 66, 70, 73

Assignment 3

- 1.3 p. 128 **On problem 17, use the points (2000, 0), (2005, 1.5), (2009, -.6) and on problem 21, use the points (2000, 0), (2005, 18.6), (2009, 29.25).**
8, 13, 16, 17, 21, 25, 26, 27, 29, 30, 32, 33, 35, 37, 39, 42

Cycle-back: 1.1 p. 107: #75; 1.2 p. 119: #56

Assignment 4

- 1.4 p. 141 **On problems 25 – 28, also give the reason why the function is not differentiable at each x.**
8, 9, 10, 11, 12, 13, 14, 15, 17, 18, 19, 20, 21, 22, 25, 26, 27, 28

Cycle-back: 1.1 p. 107: #69; 1.2 p. 119: #61; 1.3 p. 128: #15

Assignment 5

- 1.5 p. 154 13, 25, 28, 32, 39, 48, 52, 56, 60, 61, 62, 67, 76, 79, 90, 93, 96

Cycle-back: Ch 1 Review p. 190: #20, #32, #33

Assignment 6

- 1.6 p. 163 5, 7, 10, 15, 20, 21, 23, 26, 27, 30, 35, 40, 41, 46, 99, 108, 111

Cycle-back: Ch 1 Review p. 190: #21, #26, #30, #40

Assignment 7

- 1.7 p. 173 4, 7, 14, 18, 22, 25, 38, 46, 49, 51, 54, 57, 66, 67, 75, 79, 83

Cycle-back: 1.1 p. 107 #67 [Use a table to find the limit and then check your answer via the Wall Method.]

1.2 p. 118 #22; 1.4 p. 143 #16 [Find the derivative by using the definition $f'(x) = \lim_{h \rightarrow 0} \frac{f(x+h) - f(x)}{h}$.]

Assignment 8

- 1.8 p. 182 4, 11, 13, 20, 23, 30, 32, 33, 36, 39, 41, 43, 45, 49, 55, 57

Cycle-back: 1.2 p. 119 #47; 1.5 p. 154 #47; 1.6 p. 164 #45; 1.7 p. 174 #35