

## Homework: Test 2

Requirements: In order to receive credit on homework problems, you must

- Write down the original problem (unless it's an application problem...see requirements below)
- Work out the problem, clearly showing your work
- Check your answer in the back of the book or using the solutions manual in the Math Lab, as needed. (Note: also check out [www.cramster.com](http://www.cramster.com).) If your answer is incorrect, then you have to go back to find and fix the error. DON'T ERASE your original work (unless the error is small and obvious). Rework the problem!
- **Application problems:** Any application problem you solve must have the following for full credit:
  - a. The variable(s) must be defined, with units; for example, you would write "t = time (hours), c = drug concentration (mg/L)".
  - b. Some clearly organized work must be shown that justifies your answer.
  - c. The final answer must be in words, with units.

Determine total number of correctly done problems and put that in the last column.

Homework is due on the day of each exam. Print out this assignment sheet, fill in the scores and staple it to the top of your homework packet. Tip: You can print for free in the Math Lab!

Assign. #	Read this section:	Do these problems:	Problems done correctly/ Total
1	<b>Section 2.1:</b> How Do We Measure Speed?	2.1, pg 74: 1, 3, 4, 5, 6, 7, 8, 9, 10, 15, 16, 17, 18, 19, 20, 21, 23, 24, 25, 27 Note: For even answers, see "Chapter 2 Even Ans" link	<input type="text"/> /20
2	<b>Section 2.2:</b> The Derivative at a Point	2.2, pg 82: 6 – 13 ALL; 15 – 20 ALL; 27, 27, 30, 33, 35, 39, 41, 43, 45, 47	<input type="text"/> /24
3	<b>Section 2.3:</b> The Derivative Function	2.3, pg 90: 1, 2, 3, 5, 11, 17, 19, 21, 23, 24, 25, 27, 29, 35, 38, 40, 41, 45, 47	<input type="text"/> /19
4	<b>Section 2.4:</b> Interpretations of the Derivative	2.4, pg 96: 1, 3, 5, 11, 13, 17, 19ab, 25	<input type="text"/> /8
5	<b>Section 2.5:</b> The Second Derivative	1.2, pg 15: 1, 2 (down), 3, 4 (up), 16 (see even answers link), 33, 34 (do #34 as we did #33 in class, showing $\Delta(\Delta f)$ , etc., in a table ((a),g(x); (b) h(x); (c) f(x)) 2.5, pg 102: 1, 2 (B), 3, 4, 6, 7, 8 (0, 0), 9, 10 (-, +), 11, 12 (-, -), 13, 15, 17, 21, 23, 24, 27, 29, 31	<input type="text"/> /27
6	<b>Section 2.6:</b> Differentiability <b>Note: This section of homework will be part of the Test 3 Assigned Problems</b>	2.6, pg 107: 1, 2, 3, 4, 5, 10, 14 (For number 5 and number 14: Rewrite as a piecewise function and analyze the slope of the tangent on either side of $x = 0$ , THEN apply the limit definition in finding $f'(0)$ ; for all other problems, analyze using the graph only.)	<input type="text"/> /NA
9	Review for Test 1	See Review for Test 2 (link on website) for assigned problems	<input type="text"/> /15