

Homework: Sections 2.2 and 2.3 *Due: Tuesday, September 13*

- (1) For practice (not to be turned in), do problems #7 and #9 on page 102. I couldn't find good webwork problems for these, so use these to drill yourself. Check your answers in the back of the book. If you don't understand the book's answers, ask via email, or after class on Tuesday, before you turn in your assignment, so you can get the next problem right.
- (2) To be graded, do problems #4 and #8 in Section 2.2. *What I expect you to write out:* Copy each part onto your homework, so, for example, you would write (a) $\lim_{x \rightarrow 0} f(x) = \dots$. When you "explain why," answer in complete sentences.
- (3) Do problem #14 in Section 2.2. *What I expect you to write out:* Copy the problem onto your homework, so that the limits and properties that the graph satisfies are listed next to the graph. Draw the graph large enough to read (maybe covering half a page). *Tip:* Make sure your graph satisfies the vertical line test!
- (4) Do problem #24, 26 in Section 2.2. *What I expect you to write out:* Copy the problem onto your homework. Your solution should include a brief explanation of how you determined your answer.
- (5) Do problem #10 in Section 2.3. *What I expect you to write out:* Copy the question onto your homework, and answer in sentences.
- (6) For practice (not to be turned in), do problems #11-19 odd on page 112. Check your answers.
- (7) Do problem #22 in Section 2.3. *What I expect you to write out:* Copy the question onto your homework, and show your work. *Tip:* Use the multiply by 1 trick, as in Example 6 on page 108.
- (8) Do problems #25 and 26 in Section 2.3. *Tip:* Don't panic, these look trickier than they are.

Start problem #25 by making a common denominator, and adding $\frac{1}{4} + \frac{1}{x}$ to make one fraction. Then use this rule: $\frac{\left(\frac{a}{b}\right)}{c} = \frac{a}{b} \cdot \frac{1}{c} = \frac{a}{bc}$ to simplify the expression.

Start problem #26 by making a common denominator and subtracting. Be warned that $\infty - \infty$ is not necessarily equal to 0, so you cannot just plug in $t = 0$ to get your answer.

- (9) Don't forget to start your CPR essay!