

Math 114 Spring 2019
Calculus I Practice Homework 8.5
Do not turn in

Note that the odd-numbered problems in Stewart have solutions in the back of the book.

1. Stewart 3.7.25
2. Stewart 3.7.27
3. Stewart 3.7.33
4. Stewart 2.7.35
5. Compute $\lim_{x \rightarrow 3} \frac{x^2 + x - 2}{x - 1}$
6. Stewart 4.7.1
7. Stewart 4.7.3
8. Stewart 4.7.9
9. Stewart 4.7.27
10. Stewart 4.7.47

For each of the following problems, do three iterations by hand.

11. Stewart 4.6.7
12. Stewart 4.6.11
13. Stewart 4.6.13
14. Stewart 4.6.15
15. Stewart 4.6.17
16. Find a formula for the quadratic approximation of $x \sin(2x)$ near $x = 0$.
17. Find a formula for the quadratic approximation of $x^2 + 3x - 5$ near $x = 3$.
18. Find a formula for the quadratic approximation of $\sec(x)$ near $x = \pi/4$.