MAT 137
Problem Set C

This problem set is intended to help you prepare for Test 3. It is not comprehensive: it only contains some problems that were not included in past problem sets or in past tutorials. You do not need to turn in any of these problems.

For further preparation review Pre-Class Quizzes 31-47, Problem Sets 4-5, Tutorials 11 through 16, Unit 6, 7, 8 and 9 practice problems.

Problems

1. Recall the definition of the Riemann sum.

   (a) Write the Riemann sum such that its limit as $n \to \infty$ is equal to the given definite integral $\displaystyle\int_0^2 \frac{1}{1+x}\,dx$ by choosing x_i^* to be the right endpoint for each subinterval.
   Let P be the partition of $[0, 2]$ such that