

Math 160, Spring 2024.

Homework 4, due February 17th.

Prob 1. Show that the areas of two triangles with the same base and height can be approximated arbitrarily closely by the same set of rectangles, differently stacked.

Prob 2. Deduce by the method of exhaustion that the areas under the curve $y = 1/x$ from 1 to $a > 1$ and from $b > 0$ to ab are equal.

Prob 3. Give a proof of the Chinese remainder theorem using the existence of inverses mod p_j to justify Sun Zi's method.