

Homework #8 extra problems

Question 1. Find the Gini index for $L(x) = x^{4.3}$

Question 2. Find the Gini index for $L(x) = 1 - \frac{\ln(2-x)}{\ln 2}$.

Question 3. Estimate the Hoover index and Gini index for a society in which wealth is distributed as follows:

Bottom octile	5%
Second octile	7%
Third octile	9%
Fourth octile	10%
Fifth octile	11%
Sixth octile	12%
Seventh octile	15%
Top octile	31%

(“Octile” means one eighth of the population.) Use Simpson’s rule to find the Gini index. If you don’t remember how to do Simpson’s rule, you can check out this video:

<https://www.youtube.com/watch?v=MC7AtMqyqJE>