

MATH 158 Assignment 2, Spring 2010

Michael Monagan

Due Monday February 1st at 5:20 pm.

NB: the first midterm starts at 5:30pm!

Section 8.6 Area Between Two Curves

Exercises 2, 3, 6, 41, 42, 53, 56.

Section 9.1 Integration by Parts

Exercises 2, 13, 14, 30, 38, 56, 60.

For exercise 60, I get 2058.2 million tons of coal. For the integrals in exercise 60, use formula 24 from the table of integrals in Section 9.3 if you wish.

Section 9.4 Numerical Integration

Exercises 8, 39.

Section 9.5 Improper Integrals

Exercises 1, 10, 20, 31, 32.

Section 8.5 Average of a Function

Exercises 45, 48, 49.

Section 8.7 Lorenz Curves and the Gini Index

Exercise 24.

Find out the Gini index for Japan, Russia, USA, Canada, Venezuela, and China.

Which country has the least equal income distribution?

Which has the most equal distribution? Are you surprised?

Using google, I found that Mexico's Gini index was 0.46 in 2004. If we assume Mexico's Lorenz curve is x^a for some a , find a .