

MATH 104-02: Introduction to Analysis

Homework #8

Due October 30, 2013

1. Exercise 29.4
2. Exercise 30.6
3. Exercise 32.7
4. Let F be function

$$F(x) = \begin{cases} 0, & x < 1 \\ 1, & 1 \leq x < 2 \\ 3, & 2 \leq x < 3 \\ 6, & x \geq 3. \end{cases}$$

Compute $\int_0^4 x^2 dF(x)$ using the Darboux-Stieltjes integral.