

MATH 3851 Homework Assignment 5 (due Monday, February
11th)

Textbook problems:

- Section 29: (p. 92-93) 6, 12
- Section 31: (p. 97-98) 3(a,b)
- Section 32: (p. 100) 2
- Section 33: (p. 104) 2(c), 7
- Section 34: (p. 108-109) 11, 14(b)

Extra problems:

- Can you find a branch of the function $\text{Log}(e^z - 1)$ which is analytic in the domain $D = \{z : x > 1, y \in (-\frac{\pi}{2}, \frac{\pi}{2})\}$? Be specific about which branch you are using, and explain why it is analytic in D !