

MATH 2250, Fall 2010.

Homework assignment, Sept. 22, 2010

1. Show that for the logarithm defined in class via integral formula, the identity

$$e^{\log z} \equiv z$$

holds.

2. p. 154, # 3.

3. p. 161 #1

4. Evaluate

$$\oint_{|z|=3} \frac{e^z}{z^2 - 1} dz, \quad \oint_{|z|=3} \frac{e^z}{z^5 - 1} dz$$