

MATH 54 Homework 3

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June 28, 2007

Due Tuesday, July 3.

- Hill 3.1: 2, 4, 7, 11, 13, 22.
- Hill 3.2: 1, 10.
- Hill 3.3: 2, 3, 12, 18, 19, 27, 28.
- Hill 3.4: 1, 3, 7, 8, 11, 14, 29, 33, 39, 48.
- Let z_0 be any complex number, and let z_1 be any nonzero complex number. Prove that $\overline{(z_0/z_1)} = \overline{z_0}/\overline{z_1}$. [Hint: First prove that $\overline{(1/z_1)} = 1/\overline{z_1}$. Then use the result of the previous problem.]