## Homework 8

## Due: WEDNESDAY, NOVEMBER 26

November 20, 2008

1. Exercise 3.14.
2. Exercise 3.16.
3. Exercise 5.1.
4. Exercise 5.13.
5. Exercise 5.14.
6. Let $a, b, h \in \mathbb{R}$. Find the hyperbolic area of the EUCLIDEAN square $S$ with vertices $a+b i, a+h+b i$, $a+(b+h) i$, and $a+h+(b+h) i$. Find the limit of the ratio of hyperbolic area of $S$ to its Euclidean area as $h$ approaches 0 .
