

Math 185 HW#6, due 10/16/12 at 12:40 PM

1. Gamelin page 87 exercise 3.
2. Gamelin page 89 exercises 2, 4. (Note that in the book's notation, D is a connected open set.)
3. Gamelin page 117 exercise 2.
4. Gamelin page 119 exercises 1, 4.
5. Gamelin page 129 exercise 8.
6. *Extra credit:* Let $p(z)$ be a nonconstant polynomial and let c be a positive constant. Show that each component of the set $\{z \in \mathbb{C} \mid |p(z)| < c\}$ contains a zero of p .