

Math 185 HW#5, due 3/8/16 at 8:10 AM

1. Gamelin page 89 exercises 2, 4. (Note that in the book's notation, D is a connected open set.)
2. Gamelin pages 116-117 exercises 1 (all parts), 2.
3. Gamelin page 119 exercises 1, 4.
4. *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 .