

Mathematic 407, Fall 2017: Assignment #5

Due: **Thursday, October 19th**

Instructions: Please ensure that your answers are legible. Also make sure that sufficient steps are shown. Page numbers refer to the course text.

Problem #1. Chapter 3: Exercise 1.

Problem #2. Chapter 3: Exercise 2.

Problem #3. Chapter 3: Exercise 4.

Problem #4. Chapter 3: Exercise 5.

Problem #5. Show that if $f : \Omega \rightarrow \Omega$ is holomorphic and has a zero of order n at $z = 0$, then $g = f \circ f$ has a zero of order n^2 at $z = 0$.