

# PMAT 455 W 2011

## HOMEWORK 1

Page numbers refer to the text Mathematical Analysis by Apostol, 2nd Edition.

1 - 5 p.25 : 1.2 - 1.6

6 - 14 p.26 : 1.7, 1.9 - 1.16

15 Use 1.15 to show that if  $x \notin \mathbb{Q}$  then  $\{nx \pmod{1} : n \in \mathbb{Z}\}$  is dense in  $I = [0, 1]$ .