# MAT 511 Fundamental Concepts of Math 

## Problem Set 8

 due Thursday, Nov 6Please prove all your answers. Short and elegant proofs are encouraged but not required. This time all the questions are from the textbook:

Section 2.2: prove Theorem 2.7, parts dh
Section 3.1: $\quad 4 \mathrm{ab}, 3 \mathrm{df}$ (also illustrate both parts by a picture on the plane, assuming that all the sets are intervals in $\mathbb{R}$ ), 20 c

Section 3.2: 1 hijl (also determine which of these are equivalence relations), 9

