

Math 215. Homework 8

due 03/17/08

1. Let A and B be non empty finite sets of real numbers such that $A \subseteq B$. Prove that

$$\min B \leq \min A \leq \max A \leq \max B$$

Give three examples of sets A, B in which each of the three inequalities above are strict.

2. Find all the divisors of 126 and 180 and hence the greatest common divisor.
3. Prove the induction principle from the well ordering principle.
4. Prove that a finite non-empty set of reals has a minimum.