

Homework Assignment 1

Math 243, Spring 2012

1. A Problem 1.2 #21.

Show that $\min\{x, y\} + \max\{x, y\} = x + y$ for all real numbers x and y . Hint: Split the argument into two cases.

B. Use part A to prove Theorem 3 on page 12:

For positive integers m and n , we always have

$$\gcd(m, n) \cdot \text{lcm}(m, n) = mn.$$