

Math 421 - Complex Variables - Fall 2009

Extra problem for section 5

Use established properties of moduli to show that when $|z_3| \neq |z_4|$, then

$$\left| \frac{z_1 + z_2}{z_3 + z_4} \right| \leq \frac{|z_1| + |z_2|}{||z_3| - |z_4||}$$