

The majority of the credit you receive will be based on the completeness and the clarity of your responses. **Show all of your work and justify your solutions as much as possible.**

This is a 15 minute quiz and has 1 questions, for a total of 10 points

- (10 points) 1. Let  $R$  be an equivalence relation defined on a set  $A$  containing the elements  $a, b, c$  and  $d$ . Prove that if  $a R b$ ,  $c R d$  and  $a R d$ , then  $b R c$ .