

Quiz 10

Math 2001–002, Fall 2016

November 11

Question 1. Give a precise definition of the union $A \cup B$ of two sets A and B .

Question 2. Give a precise definition of what it means for a set A to be a subset of a set B (notation: $A \subseteq B$).

Question 3. Give a rigorous proof of the following statement:

Claim. For all sets A , B , and C , if $A \subseteq C$ and $B \subseteq C$ then $A \cup B \subseteq C$.