

Quiz 2

1. Write down the converse of the implication below.

If f and g are one-to-one, then $g \circ f$ is one-to-one.

Define functions $f : \{1, 2\} \rightarrow \{a, b, c\}$ and $g : \{a, b, c\} \rightarrow \{1, 2\}$ which illustrate that the converse of the implication is false. (10 pts.)

2. Prove that if A and B are subsets of a universal set U and $A \subseteq B$, then $B^c \subseteq A^c$. (10 pts.)