## Additional Problems Assignment 24

1. Show that if $A$ is $m \times n$ and $B$ is $n \times m$ such that $A B=I_{m}$ and $B A=I_{n}$ then $m=n$. (Hint use what you proved on homework and was the homework of the week that the rank of $A B$ is less than both the rank of $A$ and $B$.)
