$\begin{array}{c} {\rm Quiz~Problem~1} \\ {\rm Due~Sep.~9th,~11:59~pm~EST} \end{array}$

Problem. Let $(A_i)_{i=1}^{\infty}$ be a collection of sets. Prove DeMorgan's Law $\left(\bigcap_{i=1}^{\infty}A_i\right)^c=\bigcup_{i=1}^{\infty}A_i^c.$

$$\left(\bigcap_{i=1}^{\infty} A_i\right)^c = \bigcup_{i=1}^{\infty} A_i^c.$$