1. Suppose $a, b \in \mathbb{Z}$. Prove the following statement with contrapositive proof. Use completely formed sentences. Use definitions when appropriate.

Proposition: If $25 \nmid ab$, then $5 \nmid a$ or $5 \nmid b$.

1. Suppose $a, b, c \in \mathbb{Z}$. Prove the following statement with contrapositive proof. Use completely formed sentences. Use definitions when appropriate.

Proposition: If $a \nmid bc$, then $a \nmid b$ and $a \nmid c$.