## Answer on Question \#44919 - Math - Linear Algebra

If $W_{1}$ and $W_{2}$ are subspaces of vector space $V$ and $W_{1}+W_{2}=V$, then $W_{1} \cap W_{2}=\{0\}$

## Answer

False. $W_{1} \cap W_{2}=\{0\}$ for subspaces $W_{1}$ and $W_{2}$ of vector space $V$ means that $W_{1} \oplus W_{2}=V$, but direct sum is only the special case of $W_{1}+W_{2}$.

