1. Use a truth table to decide if $P \Rightarrow \neg Q$ and $\neg P \vee \neg Q$ are logically equivalent.

Name: $\quad$ QuIZ $6 \diamond \quad$| MATH 211 |
| ---: |
| February 7, 2023 |

1. Use a truth table to decide if $P \vee Q$ and $(P \wedge Q) \vee(P \wedge \neg Q)$ are logically equivalent.
2. Use a truth table to decide if $\neg P \vee Q$ and $\neg Q \Rightarrow \neg P$ are logically equivalent.
3. Use a truth table to decide if $\neg P \wedge(P \Rightarrow Q)$ and $\neg(Q \Rightarrow P)$ are logically equivalent.
