## Getting familiar with . . . truth tables for operators

For each of the following, construct a complete truth table. Start with the claims enclosed in the most number of parentheses, and move to the next most enclosed until you get to the main operator.

1. $(\mathrm{A} \& \sim \mathrm{~B})$
2. ~(C v D)
3. $\sim(A \supset \sim B)$
4. $(P \equiv(Q \supset R))$
5. $\sim(\sim W \& \sim P)$
6. (~Q $\supset \mathrm{R})$
7. ~ ( $P$ \& Q)
8. $(W \vee(A \vee B))$
9. $(A \vee(B \supset C))$
10. $\sim(T \equiv(U \& \sim V))$
