

Questions: Understanding the Notation for Propositional Logic

Answer the following four questions.

1. If “A” stands for the statement “the cat is chasing the rat”, then “ $\sim A$ ” stands for which statement? (Write the statement in full.)
2. If “ $\sim B$ ” stands for the statement “the dog is chasing the cat”, then “B” stands for which statement? (Write the statement in full.)
3. Let “C” stand for the statement “Chris likes eating ice cream”, and let “D” stand for the statement “Chris likes drinking soda”.
 - (a) Accordingly, “ $C \wedge D$ ” stands for which statement? (Write the statement in full.)
 - (b) Accordingly, “ $C \vee D$ ” stands for which statement? (Write the statement in full.)
4. Pick two statements of your own. Let “X” stand for one of the two statements that you picked, and let “Y” stand for the other one of the two statements that you picked.
 - (a) Accordingly, “X” stands for which statement? (Write the statement in full.)
 - (b) Accordingly, “Y” stands for which statement? (Write the statement in full.)
 - (c) Accordingly, “ $X \vee Y$ ” stands for which statement? (Write the statement in full.)
 - (d) Accordingly, “ $X \wedge Y$ ” stands for which statement? (Write the statement in full.)