

# Inclusive vs Exclusive “Or”

Math-270, Spring 2016

January 21, 2016

## Ordinary English

When speaking in ordinary English, the word “or” can be ambiguous. We rely on context cues to figure out what the speaker means. Mark each one as either “inclusive” or “exclusive.”

1. When registering for courses: To take ECON-425, you must have ECON-201 or ECON-210. \_\_\_\_\_
2. When getting lunch at the cafeteria: You can have a soup or a salad with your platter. \_\_\_\_\_
3. In a law class: A murder is automatically first-degree if it is a contract killing or if the killer lies in waiting. \_\_\_\_\_
4. Discussing travel with your spouse: This year, we cannot afford to go to Europe, but we can go to Montreal or New Orleans. \_\_\_\_\_
5. At the job fair: We will hire anyone who knows Python or Java. \_\_\_\_\_
6. Talking with your boss: Give me a raise or I’ll quit. \_\_\_\_\_
7. A pundit on the news: It is likely that that Ms. Q or Mr. J will eventually win the party’s nomination for President. \_\_\_\_\_
8. Roommates packing up in the dorms, at the end of the semester: I am hoping to reread “Separate Peace” or “All Quiet on the Western Front” this summer. \_\_\_\_\_
9. A cop speaking to a burglar: Drop the weapon or I’ll shoot! \_\_\_\_\_
10. New Employee Training: If you punch a coworker or arrive drunk, then you’re automatically fired. \_\_\_\_\_
11. Ordering at a Restaurant: Would you like the chicken grilled or fried. \_\_\_\_\_
12. At the gaming table: Roll a d20; if the result is a 20, or greater than the target’s defense number, you hit. \_\_\_\_\_

## Remember

- The symbol  $\cup$ , which is very common, always denotes an inclusive “or.”
- The symbol  $\oplus$ , which is fairly rare, always denotes an exclusive “or.”
- In mathematics, the word “or” is always an inclusive “or,” unless otherwise noted.
- Computer science (especially programming language APIs), US/UK law, and engineering documents follow the mathematical convention.