

Please complete this worksheet by **September 22nd, 2021** by **11:59pm**.

Once you upload a picture of your work ([here](#)), the solutions will become available so you can study for the weekly quizlet, which may draw one problem from this week's worksheets.

Problem 1

You decide to go for ice cream and the shop offers either vanilla or chocolate flavors. You always get vanilla ice cream or put sprinkles on top. If you pick vanilla and also add gummy bears, then you won't put a cherry on top. You never pick vanilla unless you add gummy bears or sprinkles. If you add sprinkles, you also add gummy bears. You added a cherry.

- (a) Use the rules of inference (rules 1-4 in the lecture) to deduce what other flavors and toppings are on your ice cream?
- (b) Use our automated deduction checker ([click here](#)) to verify your deduction in part (a).