

Name: \_\_\_\_\_

# CIS 351 Sample ADD3 Problem

06 January 2022

## ADD3: Carry Lookahead Adder

- (a) Sketch the lookahead logic for the carry into column 4. (Columns are indexed beginning with 0.)
- (b) Suppose one were to make a mistake and accidentally use an AND gate in place of the rightmost OR gate for the carry lookahead logic. Describe the inputs  $A$  and  $B$  that would produce a value of 1 on the carry out.