

## 4COM2003.circ-T00L1e03

You are given a design board with three input pins A, B and C, and one output pin R.

Build a *gate* circuit which outputs on R the result of evaluating the Boolean expression A and (C or B).

Use the Logisim template `4COM2003.circ-T00L1e03.circ` attached as a starting point for your circuit, but make sure you have drawn up a truth table before you attempt any wiring, so that you can check the circuit is correct.

The tester will accept any *correct* solution, but try to use the fewest gates possible to achieve the desired effect. Transistors and pull resistors are not allowed in solutions to gate exercises.

### How to submit your work

**Do not move any of the input and output pins**, since Logisim connects the test circuit to them based on their position rather than name (which is quite unfortunate, but cannot be helped)

Test the circuit by pressing on input pins with the hand control and recording your observations. When you are certain that the circuit works, reply to this message with the circuit file of your solution (and only the circuit file of your solution) in attachment. Do not change the subject line; make sure that the ticket number in it (i.e. the part that begins with \*\*) is intact.