3.6 Basic circuit drawing conventions

Designers follow several conventions when drawing digital circuits.

Figure 3.6.1: Circuit drawing conventions.

Convention	Illustration
Crossing wires only connect at filled circle.	Not a y = ac connected z = bc
Inverter often drawn as circle at gate input.	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$
One output wire splitting is OK. Multiple input wires connecting is not.	a Not OK b
Input labels are sometimes duplicated to simplify a drawing.	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$
Gate inputs are not labeled (other components may be).	g — y d z y

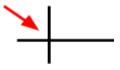
PARTICIPATION ACTIVITY

3.6.1: Drawing circuits.

1) Wires connect.

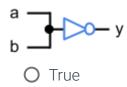


- O True
- O False
- 2) Wires connect.



- O True
- O False
- 3) The gate's output is ____.

- O jk'
- O j'k
- 4) The wiring is OK.

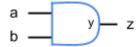


O False

5) The wiring is OK.



- O True
- O False
- 6) The label y is normally used for a gate output.



- O True
- O False
- Provide feedback on this section