## Computer Science G12

## Assignment 3. Due Tue. 10 Oct. 2017

Write your answer in a document (md, txt,pdf,html,doc,...) and submit it as an attachment via email to msantos@dragonacademy.org

- 1. How many distinct binary logic Gates do exist?
- 2. Using a NAD gate, construct the three basic logic gates, the AND, OR and NOT gates.
- 3. Do the same as in question 2. but using an XOR gate.
- 4. From the photocopies provided, check that the Adder circuit really add two 1-bit numbers with a carry bit. Complete the following table

х	у	ci	$\mathbf{s}$	co
0	0	0	0	0
0	0	1		

<sup>5.</sup> From the same reference mentioned above, do practice exercises 1-15. List any additional reference you may have used in order to complete your answer.