

L6 practice problems

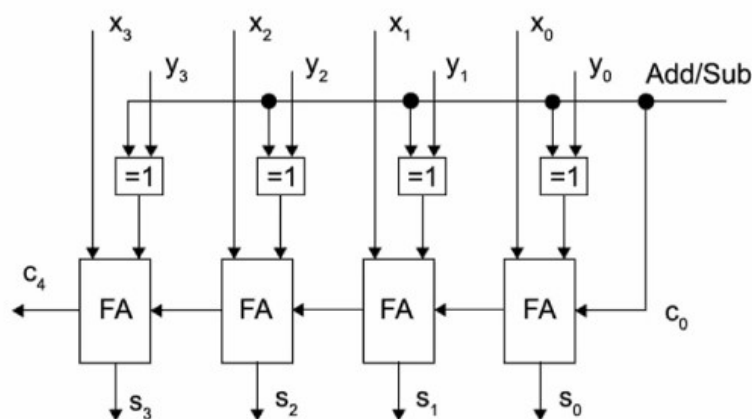
1. Perform the following unsigned addition operation. Each 8-bit unsigned input is represented in hexadecimal. Give the decimal equivalent of the input values and also of the result.

$$9F + 4E$$

2. Perform the following signed 2's complement addition. Each 8-bit signed input is represented in hexadecimal. Give the decimal equivalent of the input values and also of the result.

$$9F + 4E$$

3. Illustrate how the signed 2's complement subtraction of the decimal values (3 – 7) is carried out in the following circuit by indicating the logic level (i.e. 0 or 1) at every input and output (including carry signals) on the circuit.



4. Draw the diagram of a 6-bit wide 2's complement adder/subtractor circuit using six full adders.