

Name:.....Student ID Sent by 12/12/2024

1) Find the result of 45 – the number from the last 2 digits of your Student ID. Please explain how to get the answer as well.

a) Using **1's complement**

b) Using **2's complement**

2) **Draw connecting lines** in the circuit below to build a 2-bit adder, and **fill the 5 signals left** into the dotted-line boxes from the relationship below:

$$\begin{array}{r} A_1 \ A_0 \\ B_1 \ B_0 \\ \hline S_2 \ S_1 \ S_0 \end{array} +$$

