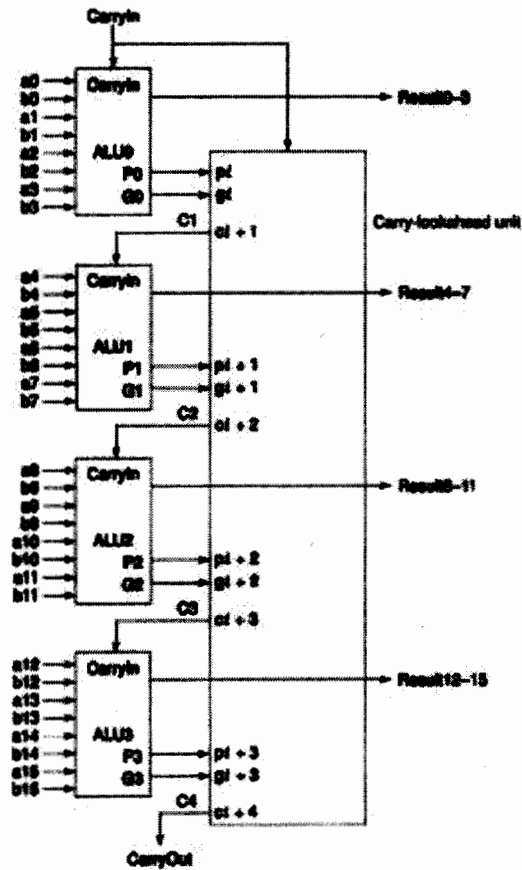


Instructions: Time 10 minutes. Closed books and notes. No calculators. Please answer all problems in the space provided. No questions are allowed.

<Good Luck>

Q. For the following 16-bit adder,



write the Boolean equations for the following:

$$p_0 = a_0 + b_0$$

$$g_0 = a_0 \cdot b_0$$

$$P_1 = p_7 + p_6 + p_5 + p_4$$

$$G_1 = g_7 + p_7 g_6 + p_7 p_6 g_5 + p_7 p_6 p_5 g_4$$