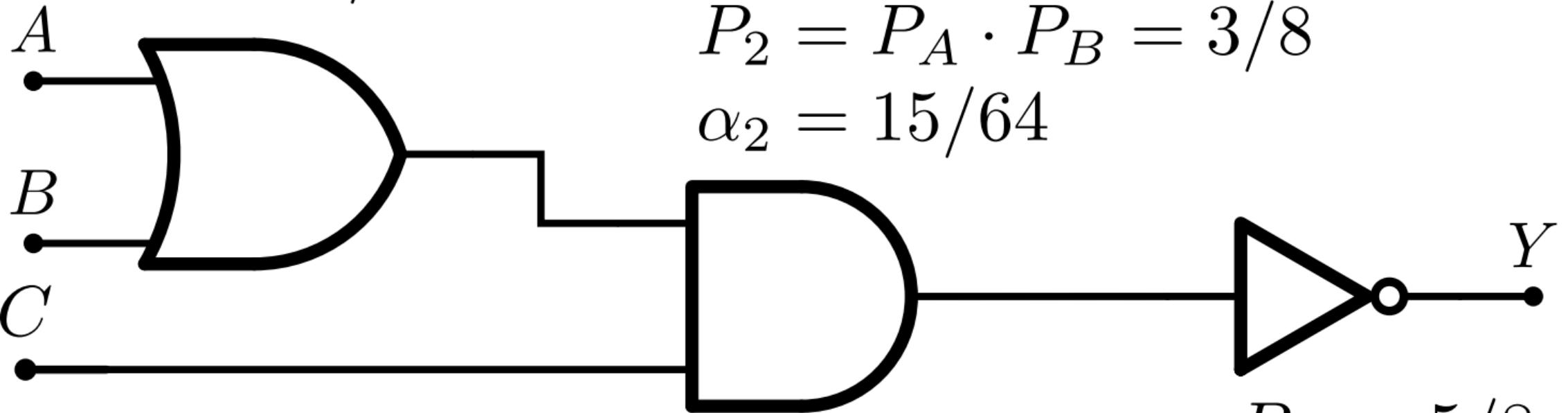


$$P_1 = 1 - P_A \cdot P_B = 3/4$$

$$\alpha_1 = 3/16$$



$$P_2 = P_A \cdot P_B = 3/8$$

$$\alpha_2 = 15/64$$

$$P_Y = 5/8$$

$$\alpha_3 = 15/64$$