

$$(1) \quad a_n = O(1) \text{ and } u_n = O(1) \Rightarrow a_n + \lambda u_n = O(1)$$

$$(2) \quad a_n = O(1) \text{ and } u_n = O(1) \Rightarrow a_n u_n = O(1)$$

$$(3) \quad a_n = o(u_n) \text{ et } b_n = O(v_n) \Rightarrow a_n b_n = o(u_n v_n)$$

$$(4) \quad a_n := \frac{n-1}{n}, \quad x_n := \frac{n^2+1}{n^2}, \\ b_n := -1, \quad y_n := -1.$$

$$a_n = O(1) \text{ and } u_n = O(1) \Rightarrow a_n + \lambda u_n = O(1) \quad (5)$$

$$a_n = O(1) \text{ and } u_n = O(1) \Rightarrow a_n u_n = O(1) \quad (6)$$

$$a_n = o(u_n) \text{ et } b_n = O(v_n) \Rightarrow a_n b_n = o(u_n v_n) \quad (7)$$

$$a_n := \frac{n-1}{n}, \quad (8) x_n := \frac{n^2+1}{n^2}, \\ b_n := -1, \quad y_n := -1.$$