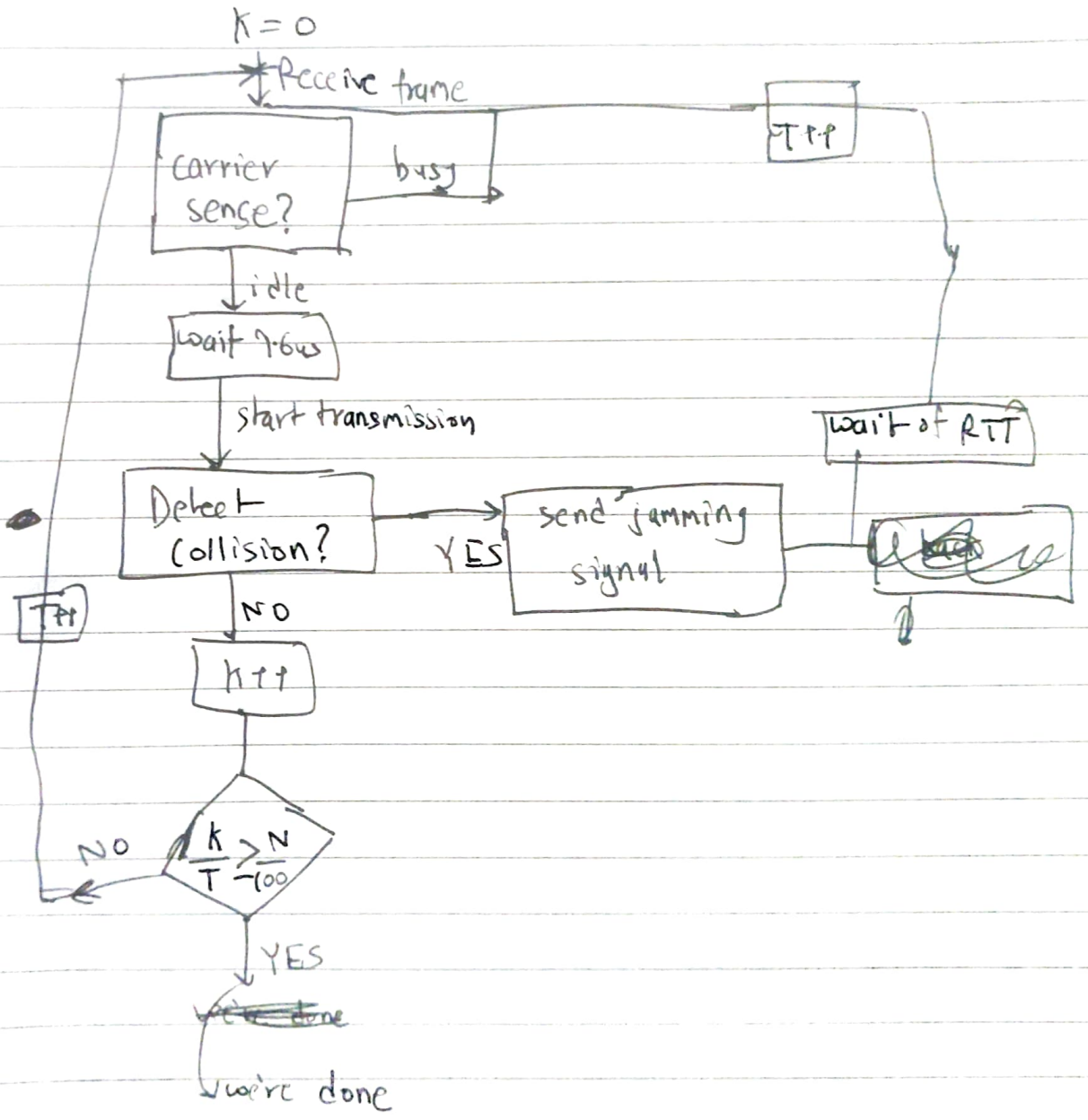
1) Let the node have a counter to measure total frames passed, successful or otherwise. (T)

Let K = no. of successful frames.



2) $T_A = T_C$ by simple symmetry.

Now, as for T_B, B, will not transmit when either of A_1 or C_1 are transmitting as it can carrier sense due to its proximity to both A_1 and C_1. Hence $\boxed{T_B < T_A = T_C}$