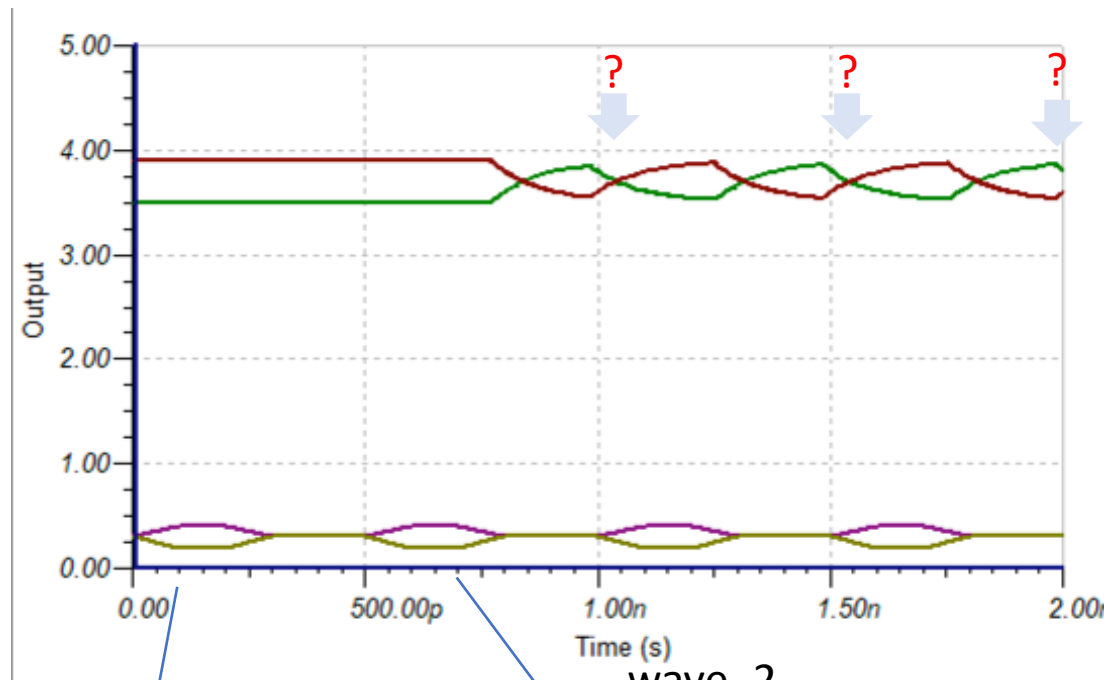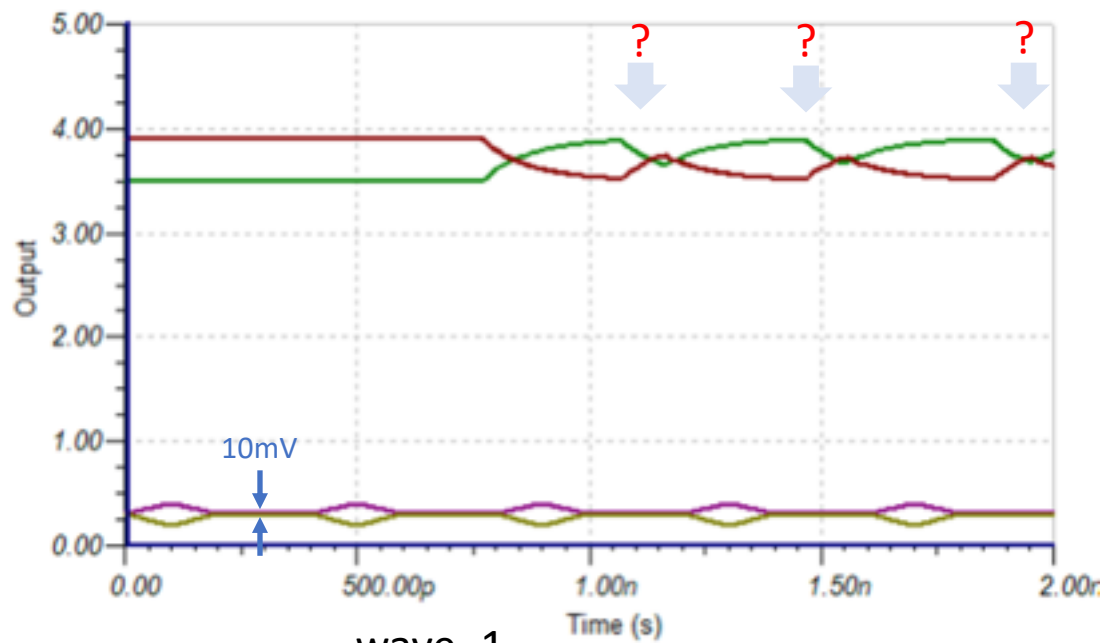Simulation circuit

wave_2

wave_1

wave_3

wave_4

expected result!

wave_0