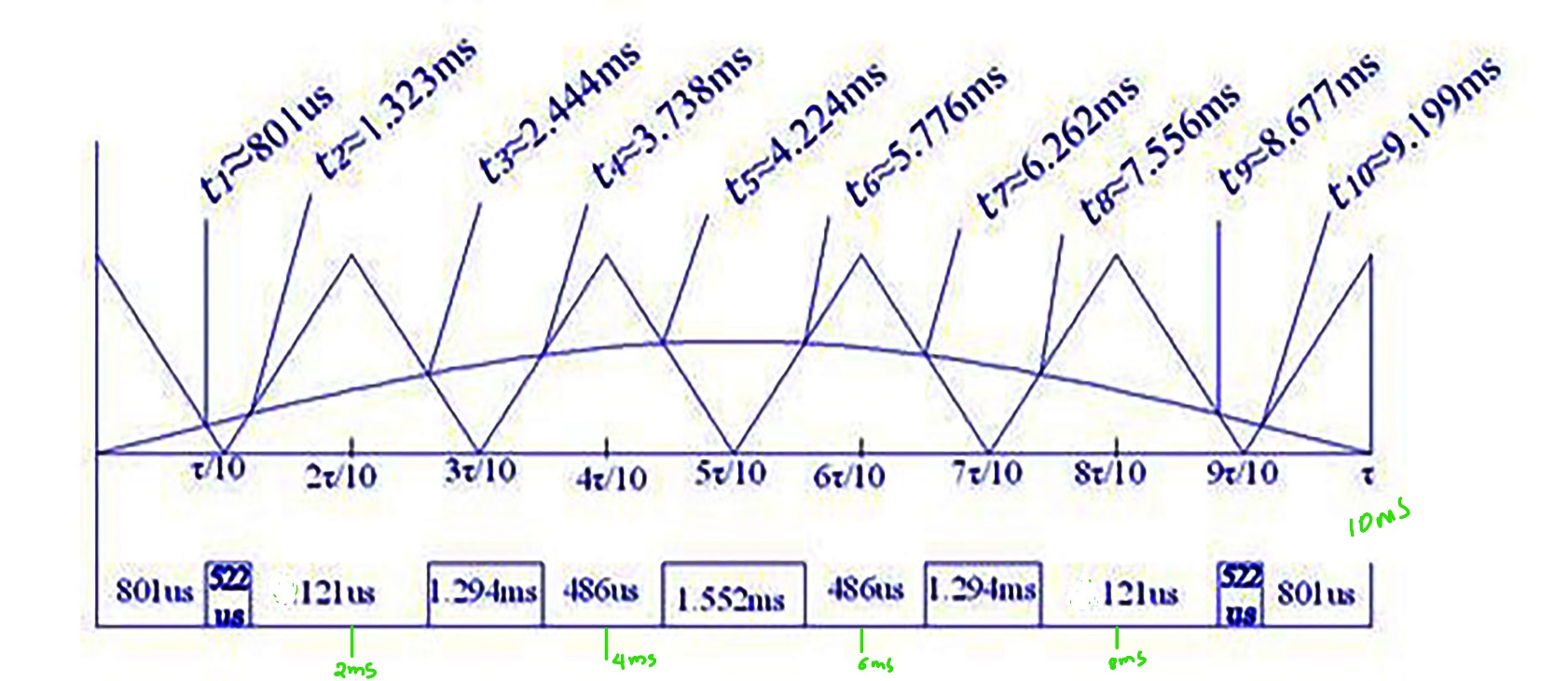
**Let’s assume frequency,**

**Number of fractions considered (per half cycle),**

**Max amplitude to pulse-width ratio,**

**Duration of half wave,**

**%Decrease of from Amplitude max. to Amplitude min.,**

**As sine wave is symmetrical wave, we can only calculate 1st quarter of the total cycle for the pulse width calculation.**

**The above diagram is a typical project from my bachelor project. At first my purpose is to create a suitable formula so that it would be easy to program with a typical microcontroller.**

**For max. Amplitude:**

**1st Left to the max:**

**2nd Left to the max:**

**A picture containing line, diagram, plot, design

Description automatically generated**

**Mid: 1ms Delay: 618.035uS| Mid: 3ms | Mid: 5ms | Mid: 7ms | Mid: 9ms |**