Math Example

To understand the CPU performance equation, we first consider its variables and units:

IC = instruction count, in units of *instructions*

CPI = cycles required to execute an instruction, in units of *cycles / instruction*

ClockPeriod = seconds per CPU clock tick = 1/clock_frequency, in units of *seconds* / *cycle*

So, IC · CPI · ClockPeriod = instructions · cycles/instruction · seconds/cycle = units of seconds.
