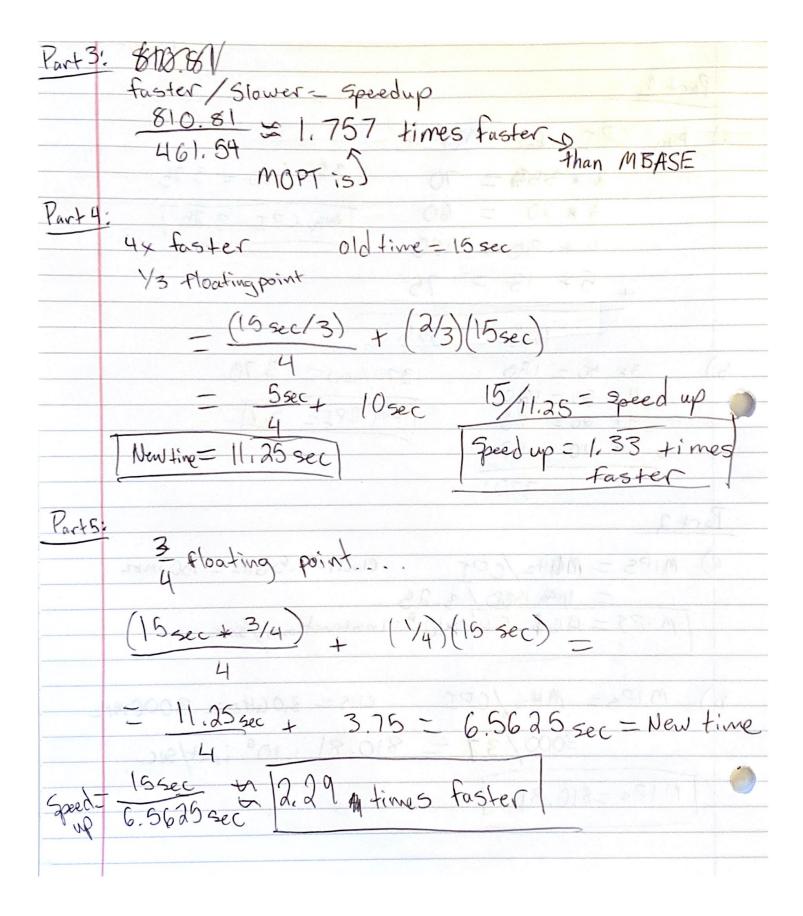
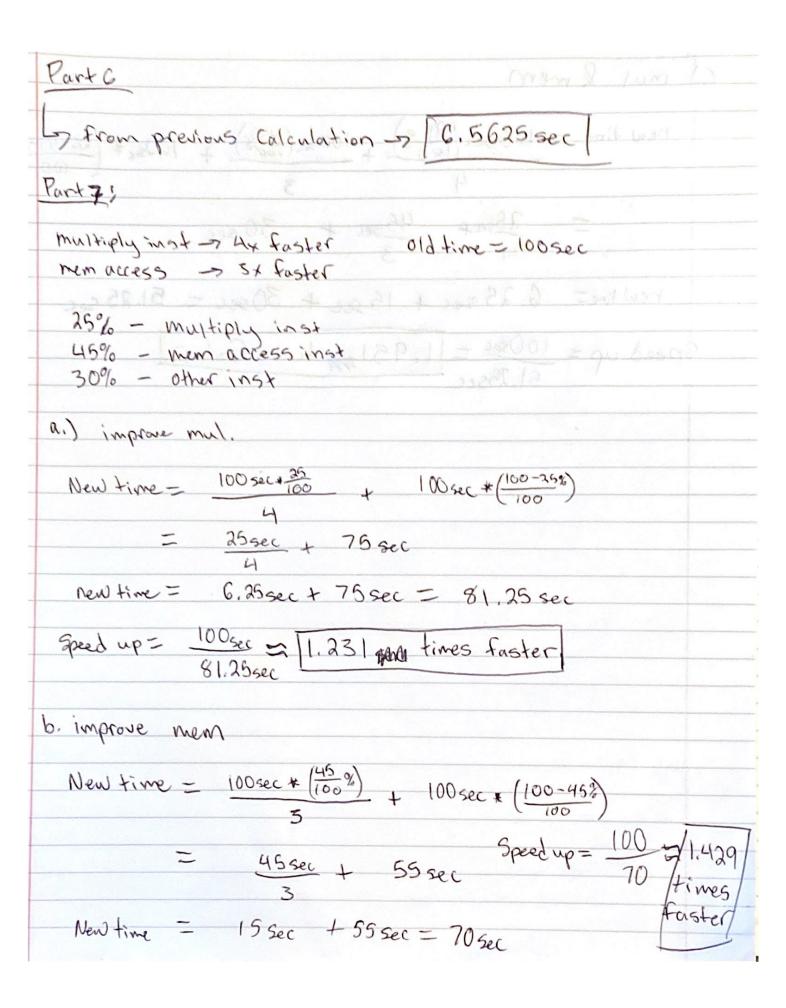
CMSC 411

9/14/20 HW 2 Part 1 Avy CPI for MBASE 325/100 = 3.252 * 35% = 70 3 * 20 = 60aug CPI= 3.25 4 * 30 = 120 + 5 * 15 = 75 325 100% 370/100- 3.70 3* 40 - 120 4 * 30 = 120 Aug CPI- 3.7 4* 20 = 80 5 * 10 = 50 310 Part 2 Clock= 1,5 GHz = 1500 mHz MIPS = MAHZ/CPT = 1251 1500/3.25 MIPS = 466.34 ×10° instructions/sec MIPS = MHZ/CPI CIS = 3,0GHZ = 3000 MHZ 3000/3.7 = 810.81 × 10° inst/sec MIPS = 810.81





C.) mul & mem

New time = $100 \sec(\frac{25 \circ}{100 \circ}) + 100 \sec(\frac{45 \circ}{100 \circ}) + 100 \sec(\frac{600 - 45 - 35 \circ}{100 \circ})$ = $\frac{25 \sec + 45 \sec + 30 \sec}{4}$ New time = $6.25 \sec + 15 \sec + 30 \sec = 51.25 \sec$ Speed up = $\frac{100 \sec}{51.25 \sec} = \frac{1.951 \sec}{51.25 \sec}$