Homework #6

1a) Adder + Adder + Adder in + register

.8 + .8 + 1.1 + (.5×3) =

= 2.85ns → 1/2.85ns = 350,877,192 Hz

= 351 MHz

1b) (.5 + .5 + .5) + 1.1 + .3 + .6

2.15ns → 1/2.15 → 465,116,279 Hz = 465 MHz

1c) 1.1 + .15 = 1.25 ns

1/1.25 ns = 800,000,000 Hz

= 800 MHz

2) Problem 6.1a vs 6.1c

A → K = 1 & N = 1000 → $\frac{1000}{1+999} = 1$

C → K = 3 & N = 1000 → $\frac{1000.3}{3+999} = 2.99$