

Assume 1 cpu, 256k core

1. n users produce 0.8u interactions per minute

Each interaction must take $\frac{0.95}{.8u}$ minutes, or $\frac{60 \times 0.95}{.8u}$ seconds,

$$\frac{24}{30} = \frac{4}{5}$$

$$\begin{array}{r} 7.5 \\ 9.5 \\ \hline 37.5 \\ 67.5 \\ \hline 71.25 \end{array}$$

allowing 5% of processor idle time to absorb peaks.

$$t_i \leq 72/n \text{ seconds.}$$

$$\frac{15}{.2} \times 0.95$$

n	average t_i , seconds
8	9
16	4.5
32	2.25
64	1.125

2.