4.4.1

- memory can be utilized with better efficiency
- avoid external fragmentation
- less input/output
- process is not constrained by the size of physical memory
- easier to share the pages
- increase in overheads due to interrupts and page tables, need longer memory access time

4.4.2

1. P * (TLB access time + memory access time) + (1 – P) * (TLB access time + (k + 1) * memory access time)
2. 0.8 * (20 + x) + (0.2) * (20 + 4 * x) <= 180
   20 + 1.6x <= 180
   x <= 100
   so the maximum memory access time is 100 nanoseconds