HW9.4. Virtual Memory Potpourri

Q1: Which of the following statements about virtual memory are true?

- [ ] (a) Virtual memory allows programs to access more memory than is available in the real primary memory of the machine.
- [ ] (b) Virtual memory reduces memory access latency.
- [ ] (c) Virtual memory provides protection for the operating system.
- [ ] (d) Virtual memory gives programs their own address space (starting at address zero).
- [ ] (e) The size of virtual memory can be smaller than the size of physical memory.

Select all possible options that apply. ❓

Q2: Which is the primary need for a translation look-aside buffer (TLB) when using virtual memory?

- [ ] (a) It significantly reduces the average access time to memory by caching page table information.
- [ ] (b) It is used to keep copies of the page protection information so that access can be checked before retrieving pages from secondary storage.
- [ ] (c) It solves the problem of locality of reference when pages which are stored a long way from each other are accessed at the same time.
- [ ] (d) It buffers pages in physical memory so that access to them is faster.

Select all possible options that apply. ❓

Save & Grade *20 attempts left*   **Save only**   *Additional attempts available with new variants* ❓