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Logical/Geometric vs. Mathematical Layout

Example: the first byte of the user text

- The first byte in the entire virtual address space
- Means the first PTE in the first level-2 table pointed to by first level-1 entry
- First address 0x00000000: level-1 index = 0, level-2 index = 0

Example: the last byte of the user stack

- The last byte immediately below the halfway point in the virtual address space
- Last PTE in last level-2 table pointed to by the level-1 entry just below middle
- Last address 0x7fffffff: level-1 index = 0x1ff = 511, level-2 index = 0x3ff = 1023

Example: the first byte of the kernel text

- The first byte immediately above the halfway point in the virtual address space
- First PTE in first level-2 table pointed to by the level-1 entry just above middle
- First address 0x80000000: level-1 index = 0x200 = 512, level-2 index = 0

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