

| Name | Example | Comments |
|------------------------------|---|--|
| 32 registers | x0 - x31 | Fast locations for data. In RISC-V, data must be in registers to perform arithmetic. Register x0 always equals 0. |
| 2 ⁶¹ memory words | Memory[0], Memory[8], ..., Memory[18,446,744,073,709,551,608] | Accessed only by data transfer instructions. RISC-V uses byte addresses, so sequential doubleword accesses differ by 8. Memory holds data structures, arrays, and spilled registers. |