**Define the following terms:**

* Random Access Memory:
  + (the most common computer memory which can be used by programs to perform necessary tasks while the computer is on; an integrated circuit memory chip allows information to be stored or accessed in any order and all storage locations are equally accessible)
* Cache Memory:
  + a [cache](http://en.wikipedia.org/wiki/Cache_%28computing%29) used by the [central processing unit](http://en.wikipedia.org/wiki/Central_processing_unit) of a [computer](http://en.wikipedia.org/wiki/Computer) to reduce the average time to access [memory](http://en.wikipedia.org/wiki/Computer_storage).
* Memory Address Register:
  + a [CPU](http://en.wikipedia.org/wiki/Central_processing_unit) register that either stores the [memory address](http://en.wikipedia.org/wiki/Memory_address) from which data will be fetched to the CPU or the address to which data will be sent and stored.
* Memory Data Register:
  + the [register](http://en.wikipedia.org/wiki/Processor_register) of a [computer](http://en.wikipedia.org/wiki/Computer)'s [control unit](http://en.wikipedia.org/wiki/Control_unit) that contains the data to be stored in the [computer storage](http://en.wikipedia.org/wiki/Computer_storage) (e.g. RAM), or the data after a fetch from the computer storage. It acts like a buffer and holds anything that is copied from the memory ready for the processor to use it.
* Non-Destructive Fetch and Destructive Store (As it pertains to memory):
  + Non-destructive fetch is the access of stored data without deleting it.
  + Destructive Store is when new data is stored, deleting previous data.
* Memory Access Time:
  + the delay time between the moment a [memory controller](http://en.wikipedia.org/wiki/Memory_controller) tells the memory module to access a particular [memory column](http://en.wikipedia.org/wiki/RAM#Memory_hierarchy) on a [RAM](http://en.wikipedia.org/wiki/Random_access_memory) module, and the moment the data from the given array location is available on the module's output pins.
* Read Only Memory:
  + memory whose contents can be accessed and read but cannot be changed)
* Dual In-Line Memory Module (DIMM):
  + a series of [dynamic random-access memory](http://en.wikipedia.org/wiki/Dynamic_random-access_memory) [integrated circuits](http://en.wikipedia.org/wiki/Integrated_circuit). These modules are mounted on a [printed circuit board](http://en.wikipedia.org/wiki/Printed_circuit_board) and designed for use in [personal computers](http://en.wikipedia.org/wiki/Personal_computer), [workstations](http://en.wikipedia.org/wiki/Workstation) and [servers](http://en.wikipedia.org/wiki/Server_%28computing%29)

**Following is the progression of RAM. Define the properties of each.**

* DRAM (Dynamic RAM):
* SDRAM – Synchronous Dynamic RAM
* SDR SDRAM – Single Data Rate SDRAM
* DDR SDRAM – Double Data Rate SDRAM
* DDR2 SDRAM – Double Data Rate (x 2) SDRAM
* DDR3 SDRAM – Double Data Rate 2 (x 2) SDRAM
* DDR4 SDRAM – Double Data Rate 3 (x2) SDRAm