

3 A user's computer has a central processing unit (CPU) that has a clock speed of 2 GHz.

She wants to change it to a CPU that has a clock speed of 3 GHz.

(a) (i) State what is meant by clock speed.

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..... [1]

(ii) Explain the effect this change will have on the performance of the CPU.

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..... [2]

(b) The CPU contains a memory address register (MAR).

Describe the role of the MAR in the fetch–decode–execute cycle.

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..... [2]

(c) The CPU has a list of all the machine code commands it can process.

State the name of this list of commands.

..... [1]