Quiz 1

A computer system can either be byte-addressable or word-addressable depending on how its memory is organized.

1. Computer **A** has a 20 bit address bus and is byte-addressable.

2. Computer **B** has a 19 bit address bus and is word-addressable, with a 16-bit word size.

a) Calculate the total memory capacity of Computer A in Byte and in MB

b) Calculate the total memory capacity of Computer B in Byte and MB

c) Which computer can access more total memory? By how much?

d) Draw and label the Von-Neumann architecture for one of these computers.