**Microblaze**
Know the addressing schemes (linear, complete, partial). How they are implemented in hardware?

**8088**
Study the bus cycle. How is a bus cycle started? When is it finished? How many clock cycles are typical in a bus cycle? What signals are asserted and when during the bus transaction?
Know about the dedicated data pins the 8088 provide.
Address bits and how much address space can be addressed.
Directionality of the bus

**68000**
Know about the read/modify/write cycle.
Endianness for the 68000
What happens if a slave doesn't respond?

**AXI IPIF**
Know which signals are used to drive addresses on the bus (address and data)
Slave acknowledgement signals for both read and write transactions

**AXI Bus**
Transaction channels (reading and writing and directionality for each). How is a read or write specified? Know about transaction IDs. When is a write transaction complete?
Know what a beat is and what can happen in a single beat.
Know about a burst as well.
A bus error occurs. Who is in charge of handling it?
Handshaking on the bus. Look at a timing diagram. Know when the handshake occurs.
Signals to know about: AWVALID, ARVALID, BREADY, RREADY, RVALID, WVALID, WREADY BRESP

**Synchronizers**
Know when 1-FF synchronizers are allowed to be used.
Synchronizer errors
Know about synchronizing flip flops