# 3. Basic computer architectures

## SISD

- There is only one processor
- The processor executes one sets of instructions on one sets of data

## SIMD

- The processor has several ALUs // several processors
- Each ALU executes the same set of instructions on different sets of data at the same time

## MISD

- There are several processors
- Each processor executes different set of instruction on the same set of data at the same time

## MIMD

- There are several processors
- Each processor execute different set of instruction
- Each processor operate on different set of data

## Past-paper questions

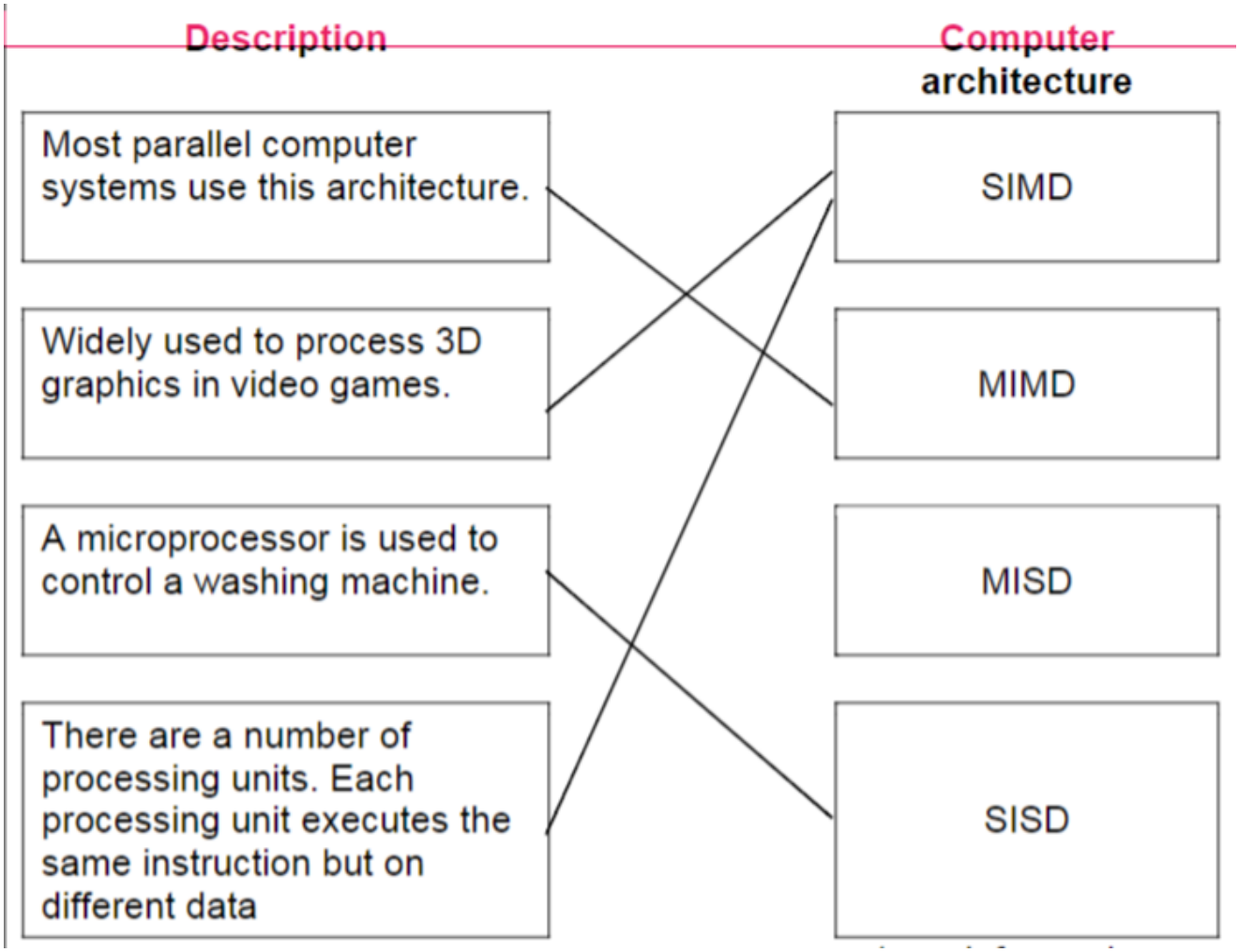
[

| Statement | Architecture | | |
|---|---|---|---|
| | SIMD | MIMD | SISD |
| Each processor executes a different instruction | | ✓ | |
| There is only one processor | | | ✓ |
| Each processor executes the same instruction input using data available in the dedicated memory | ✓ | | |
| Each processor typically has its own partition within a shared memory | | ✓ | |

]

---

[




]