Kahoot!

TLB quiz

1 play · 72 players

A kahoot by Penn State

Questions (7)

1 - Quiz
What is NOT true about TLB?

60 sec

🔺 It reduces the number of accesses to the page table ✗

🔷 It can be fully associative in the real world ✗

🟡 Miss from a TLB will cause a page fault ✓

🟩 It is usually very small, with only 16-512 entries ✗

2 - True or false
If an access causes a page fault, it will always cause a TLB miss

20 sec

🔺 True ✓

🔷 False ✗

3 - True or false
It is possible to have a TLB hit but a cache miss

20 sec

🔺 True ✓

🔷 False ✗

4 - True or false

It is possible to have a page table miss (page fault) and a cache hit

20 sec

△ True ✗

◇ False ✓

5 - True or false

It is possible to have a TLB hit but a page table miss (page fault)

20 sec

△ True ✗

◇ False ✓

6 - Quiz

What is NOT true about a page fault?

60 sec

△ It occurs more rarely than a TLB miss ✗

◇ If a page to be evicted is dirty, it has to be written back to the storage ✗

○ While the page is being read/written, another process runs ✗

□ It is done by a dedicated hardware ✓

7 - Quiz

Using a virtual address for cache lookup can cause a problem when...

60 sec

△ The page size is too small or the cache size is too large ✗

◇ Two programs are sharing data ✓

○ Always accessing the TLB even on a cache hit is too slow ✗

□ Cache hit rate is extremely high ✗