edX **CornellX: ENGRI1210x The Computing Technology Inside Your Smartphone**

⌂ **KarenWest**   ▼

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Help

TWO-WAY SUPERSCALAR PIPELINE

4:18 / 4:18   1.0x

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1. CHECK YOUR UNDERSTANDING (1/1 point)

Recall that a pipelined processor can, in the absence of hazards, achieve a Cycles Per Instruction (CPI) close to 1. What CPI can be achieved in a 2-way superscalar pipeline in the absence of hazards?

○ Close to 0.25

◉ Close to 0.5 ✔

○ Close to 1

○ Close to 2

EXPLANATION

With a 2-way superscalar pipeline we are able to complete close to two instructions per cycle (IPC, the inverse of CPI). That means that every instruction takes on average close to 0.5 cycles to complete.

| Final Check | **Save** | Hide Answer | *You have used 1 of 2 submissions*

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