

Test yourself!?

Question: A benchmark program is run on a 40 MHz processor. The executed program consists of 100,000 instruction executions, with the following instruction mix and clock cycle count:

Instruction Type	Instruction Count	Cycles per Instruction
Integer arithmetic	45,000	1
Data transfer	32,000	2
Floating point	15,000	2
Control transfer	8000	2

Determine the effective CPI (**ANS: 1.55**), MIPS rate (**ANS: 25.8**), and execution time (**ANS: 3.875**) for this program.