Remember to show all your work

Chapter 1 Homework

Check yourself problem on page 40

1.4

1.7

1.9

1.10

1.12

Problem

Computer A has an overall CPI of 1.3 and can be run at a clock rate of

600MHz. Computer B has a CPI of 2.5 and can be run at a clock rate of

750 Mhz. We have a particular program we wish to run. When compiled for

computer A, this program has exactly 100,000 instructions. How many instructions would the program need to have when compiled for Computer

B, in order for the two computers to have exactly the same execution time

for this program?