# Instruction Execution Estimation Worksheet Function: f3

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**Before Optimization**

One-time executions per function call = (a) 13 (for reference only. Not used in calculations)

[ Outer loop instructions per iteration = 10 X (i)\* #iterations: 200= (b) 2000 ]  
 \* (if applicable, otherwise use a value of i=1 in the calculation of (d) below)

Inner loop instructions per iteration = 21 X #iterations: 200 = (c) 4200

Total # instructions per function call = ( [ (i) \* ] X (c) ) + (b) = (d) 842,000

# function calls (see C program main function) = (e) 5000

Total # instructions executed by program = (d) X (e) = 4,210,000,000   
(copy to Function Summary Report)

**After Optimization**

One-time executions per function call = (a) 13 (for reference only. Not used in calculations)

[Outer loop instructions per iteration = 19 X (i) \*#iterations: 200 = (b) 3800]  
\* (if applicable, otherwise use a value of i=1 in the calculation of (d) below)

Inner loop instructions per iteration = 15 X #iterations: 200 = (c) 3000

Total # instructions per function call = ( [ (i) \*] X (c) ) + (b) = (d) 603800

# function calls (see C program main function) = (e) 5000

Total # instructions executed by program = (d) X (e) = 3,019,000,000   
 (copy to Function Summary Report)