A. .
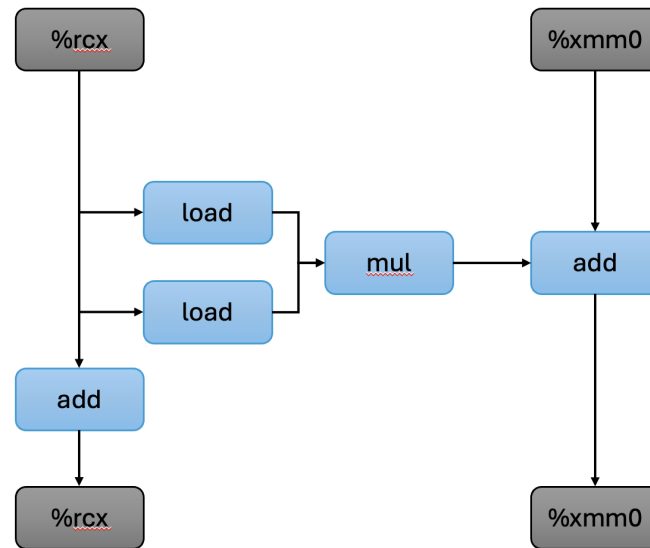

Figure 1: Data flow figure

As you can see in figure 1, the data in the register %—xmm0 in previous iteration will be reused in the next iteration.

B. For data type double, what lower bound on the CPE is determined by the critical path?
The only operation on the critical path is floating point addition with CPE of 3.0.

C. .
1.0

D. .
The result of multiplication can be calculated previously before it used in the accumulator.