

③

DIV R₁, F/G R₁ ← [F]/[G]

MPY R₂, D, E R₂ ← [D] * [E]

SUB R₃, R₂, R₁ R₃ ← [R₂] - [R₁]

ADD R₄, R₃, C R₄ ← [R₃] + [C]

MPY A, R₄, B A ← [R₄] * [B]

②

$$A = B * (C + D * E - F / G)$$

MOV R₁, D R₁ ← [D]

MUL R₁, E R₁ ← [R₁] * [E]

MOV R₂, F R₂ ← [F]

DIV R₂, G R₂ ← [R₂] / [G]

SUB R₁, R₂ R₁ ← [R₁] - [R₂]

MUL R₁, B R₁ ← [R₁] * [B]

MOV A, R₁ A ← [R₁]

①

LOAD ~~F~~

$ACC \leftarrow [F]$

~~MUL~~ ~~G~~

$ACC \leftarrow ACC \times [G]$

STORE R_1

$R_1 \leftarrow ACC$

LOAD ~~F~~

$ACC \leftarrow [F]$

~~MUL~~ ~~E~~

$ACC \leftarrow [ACC] \times [E]$

SUB R_1

$ACC \leftarrow ACC - [R_1]$

ADD R_1, C

$$R_1 \leftarrow R_1 + [C]$$

~~AND~~ R_1, B

$$R_1 \leftarrow R_1 * [B]$$

MOV A, R_1

$$A \leftarrow [R_1]$$

PUSH F

$TOS \leftarrow A$

PUSH G

$TOS \leftarrow B$

~~POP~~

$TOS \leftarrow (A/B)$

PUSH D

$TOS \leftarrow D$

PUSH E

$TOS \leftarrow E$

MUL

$TOS \leftarrow (D * E)$

SUB

$TOS \leftarrow (D * E) - (F/G)$

PUSH C

$TOS \leftarrow C$

ADD

$TOS \leftarrow C + (D * E) - (F/G)$

PUSH B.

$TOS \leftarrow B$

MUL

$TOS \leftarrow B * (C + D * E - (F/G))$

POP A

$[A] \leftarrow TOS$