

; Z is at R5+0, VAL is at R5 - 1, X is at R5 + 4, Y is at R5+5

; x > y ?? $x - y > 0$

LDR R0,R5,#4 ; copy X into R0

LDR R1,R5,#5 ; copy Y into R1

NOT R1,R1 ; negate Y

ADD R1,R1,#1

ADD R0,R0,R1 ; calculate X - Y

BRnz NOT_THEN ; x <= y, so do not execute THEN code

; DIVIDE ... DIVIDE R0 by R1, return quotient in R0

; MULT ... MULT R0 by R1, return product in R0