

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

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

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

; val = x - y * z;

LDR R0,R5,#5 ; copy Y into R0

LDR R1,R5,#0 ; copy Z into R1

JSR MULT ; R0 = R0 * R1

NOT R0,R0 ; negate Y * Z

ADD R0,R0,#1

LDR R1,R5,#4 ; copy X into R1

ADD R1,R1,R0 ; calculate X - Y * Z into R1

STR R1,R5,#-1

NOT_THEN ; now we are going to return val

LDR R0,R5,#-1 ; copy VAL into R0

STR R0,R5,#3 ; store val into return value slot

... back to TEARDOWN_STACK_FRAME