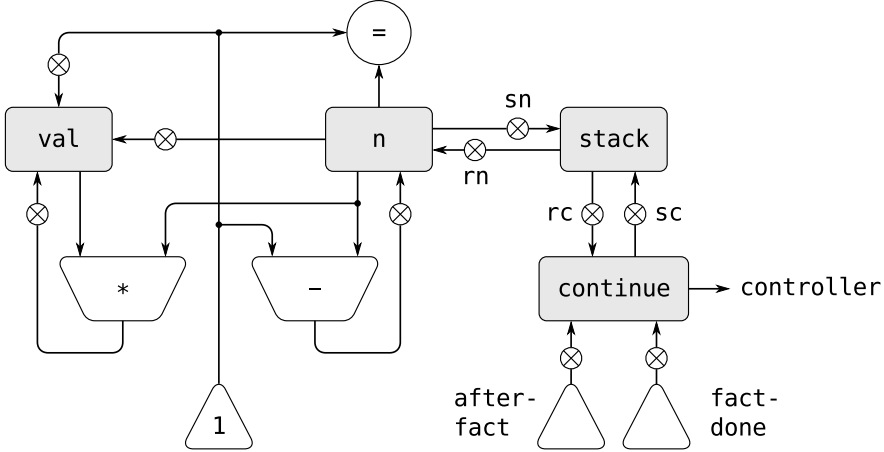


```
(controller
   (assign continue (label fact-done))   ;set up final return address
 fact-loop
   (test (op =) (reg n) (const 1))
   (branch (label base-case))
   ;; Set up for the recursive call by saving n and continue.
   ;; Set up continue so that the computation will continue
   ;; at after-fact when the subroutine returns.
   (save continue)
   (save n)
   (assign n (op -) (reg n) (const 1))
   (assign continue (label after-fact))
   (goto (label fact-loop))
 after-fact
   (restore n)
   (restore continue)
   (assign val (op *) (reg n) (reg val))  ;val now contains n(n - 1)!
   (goto (reg continue))                  ;return to caller
 base-case
   (assign val (const 1))                 ;base case: 1! = 1
   (goto (reg continue))                  ;return to caller
 fact-done)
```