

function paramtest

paramtest:

```
# prologue, update stack pointer
pushq %rbp # save old base pointer
movq %rsp, %rbp # set new base pointer
push %rbx # %rbx is callee-saved
```

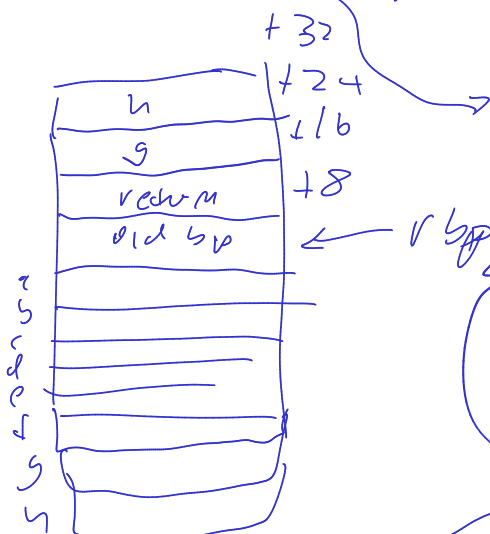
localvars x a b c d e f g h

```
# allocate stack space for locals
sub $72, %rsp
```

params a b c d e f g h

entire stack

```
# move register parameter a to local variable
mov %rdi, -16(%rbp)
# move register parameter b to local variable
mov %rsi, -24(%rbp)
# move register parameter c to local variable
mov %rdx, -32(%rbp)
# move register parameter d to local variable
mov %rcx, -40(%rbp)
# move register parameter e to local variable
mov %r8, -48(%rbp)
# move register parameter f to local variable
mov %r9, -56(%rbp)
# move stack parameter g to local variable
mov 16(%rbp), %rax
mov %rax, -64(%rbp)
# move stack parameter h to local variable
mov 24(%rbp), %rax
mov %rax, -72(%rbp)
```



x := c

```
# assign c to x
mov -32(%rbp), %rax
mov %rax, -8(%rbp)
```

return x

```
# set return value
mov -8(%rbp), %rax
# epilogue
pop %rbx # restore rbx for the caller
mov %rbp, %rsp # restore old stack pointer
pop %rbp # restore old base pointer
ret
```

