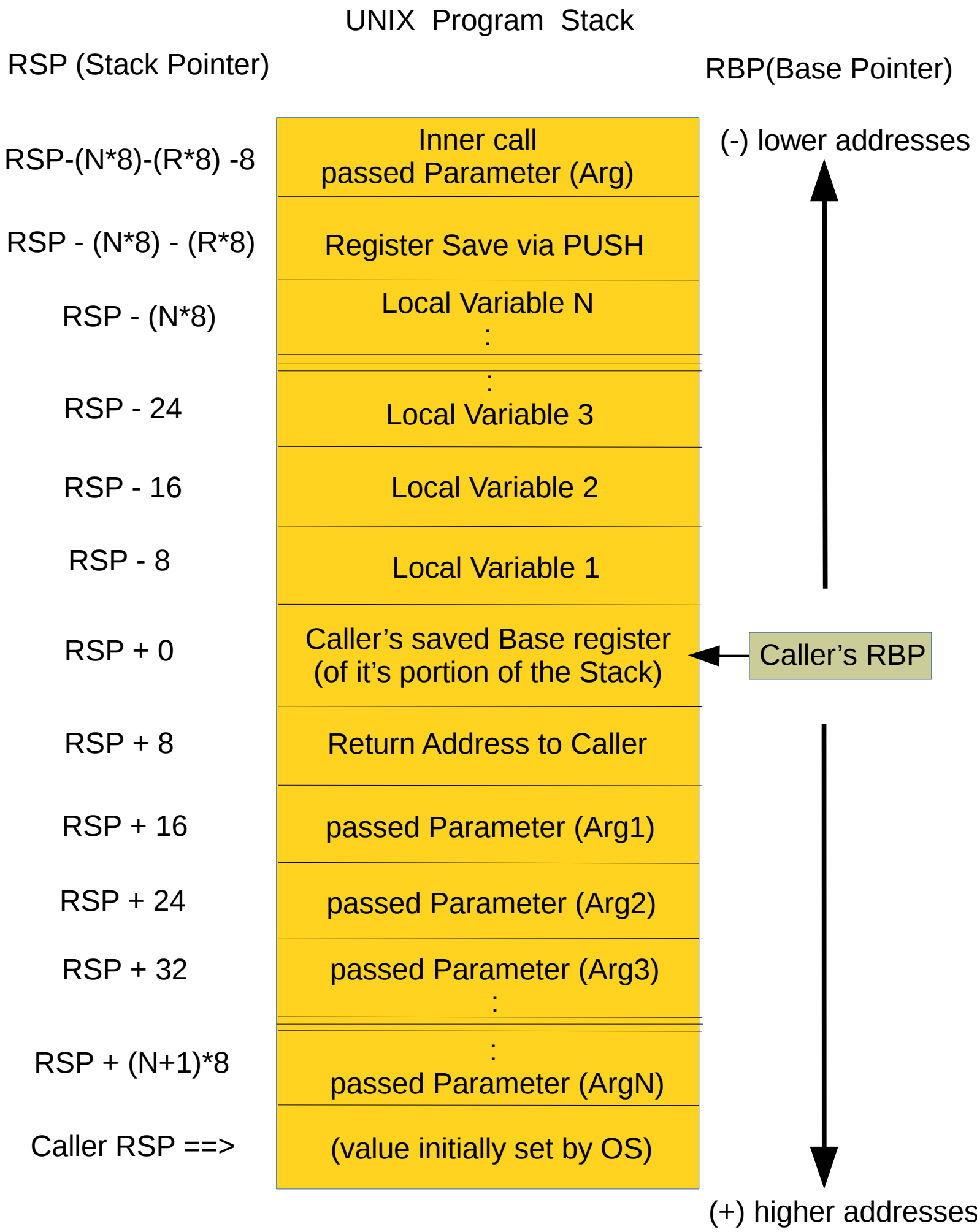
UNIX Program Stack
RSP (Stack Pointer)
RBP(Base Pointer)
(-) lower addresses
RSP-(N*8)-(R*8) -8
Inner call
passed Parameter (Arg)
RSP - (N*8) - (R*8)
Register Save via PUSH
RSP - (N*8)
Local Variable N
:
:
RSP - 24
Local Variable 3
RSP - 16
Local Variable 2
RSP - 8
Local Variable 1
RSP + 0
Caller's saved Base register
(of it's portion of the Stack)
Caller's RBP
RSP + 8
Return Address to Caller
RSP + 16
passed Parameter (Arg1)
RSP + 24
passed Parameter (Arg2)
RSP + 32
passed Parameter (Arg3)
:
:
RSP + (N+1)*8
passed Parameter (ArgN)
Caller RSP ==>
(value initially set by OS)
(+) higher addresses