5.0 Let $A$ be a nonempty array-of-naturals variable

$A: [(\text{nat}+1)\times\text{nat}]$

and there are no other variables.

(a) Express $A(A(A\,0)):=A\,0$ without using $:=$. 

\[
A' = A\,(A\,0) \rightarrow A\,0 \mid A
\]

or

$A'(A(A\,0)) = A\,0 \land (\forall j: j \neq A(A\,0) \Rightarrow A'\,j = A\,j)$

(b) Suppose initially $A = [2; 0; 1]$. What is the final value after execution of the array element assignment in part (a)?

\[
A' = [2; 2; 1]
\]