

MODULE *appex1_1*

modules de base importables

EXTENDS *Naturals*, *Integers*, *TLC*

CONSTANTS *max*

VARIABLES *np*

tentative 1

entrer \triangleq

$\wedge \text{TRUE}$

$\wedge np' = np + 1$

sortir \triangleq $np' = np - 1$

next1 \triangleq *entrer* \vee *sortir*

Init \triangleq $np = 0$

tentative 2

entrer2 \triangleq $np < max \wedge np' = np + 1$

next2 \triangleq *entrer2* \vee *sortir*

tentative 3

sortir2 \triangleq $np > 0 \wedge np' = np - 1$

next3 \triangleq *entrer2* \vee *sortir2*

Safety1 \triangleq $np \in \text{Int}$

Safety2 \triangleq $np \leq max$

Safety3 \triangleq $np \geq 0$

qq \triangleq $np \neq 89$

Safety \triangleq *Safety1* \wedge *Safety2* \wedge *Safety3*

Check \triangleq *rte*

Test \triangleq *Safety*
