2) a) (n, s, s') — n: amt at beginning of year; s': amt spent in prev year; s: amt spent in current year

Initial State: $(N, 1, 0)$ or $(N, -1, 0)$
GOAL States: $(0, 0, 1)$

Step Cost Function: s, which could be $s'+1$, $s'-1$, or s'

Successor Functions: $(n, s, s' \mid s'-1=s \vee s'+1=s \vee s'=s) \Rightarrow (n-s, s+1, s)$
$(n-s, s-1, s)$
$(n-s, s, s)$

b) Not admissible because the amount of money in the account can increase if $n>0$, or if $n<0$, then amt in account can keep decreasing. Therefore, not consistent

c) $h = |s| - 1$ is admissible and consistent

d) $(12, 1, 0) \to (11, 2, 1) \to (9, 3, 2) \to (6, 3, 3) \to (3, 2, 3) \to (1, 1, 2) \to$
$h=5 \quad h=5 \quad h=4 \quad h=3 \quad h=2 \quad h=1$

$\to (0, 0, 1)$
$h=0$