```
\functions {
}

\programVariables {

}


\problem {

(\forall R x1 . \forall R v1 . \forall R a1 . \forall R vsl .\forall R xsl .\forall R B .
\forall R A. \forall R ep.
\forall R xj. \forall R vj. \forall R aj. \forall R sl . \forall R slPos . \forall R MAXBREAK
. \forall R MAXACCEL . \forall R TICK.

(
(x1 - 1< xj & xj <= x1 & (x1 >= 0 -> xj >= 0) & (x1 < 0 -> xj <0) &
v1 -1 < vj & vj <= v1 & (v1 >= 0 -> vj >= 0) & (v1 < 0 -> vj <0) &
a1 - 1 < aj & aj <= a1 & (a1 >= 0 -> aj >= 0) & (a1 < 0 -> aj <0) &
vsl - 1 < sl & sl <= vsl & (vsl >= 0 -> sl >= 0) & (vsl < 0 -> sl <0) &
xsl - 1 < slPos & slPos <= xsl &(xsl>= 0 -> slPos >= 0) & (xsl < 0 -> slPos <0) &
-B + 1 > MAXBREAK & MAXBREAK >= -B & (-B >= 0 -> MAXBREAK >= 0) & (-B < 0 -> MAXBREAK < 0) & */
A-1 < MAXACCEL & MAXACCEL <= A & (A >= 0 -> MAXACCEL >= 0) & (A < 0 -> MAXACCEL <0) &
TICK = ep & ep = 2 & vj >= 0  & v1 >= 0 & B > 0 & MAXACCEL >= 0 & xj >= 0 & x1 >= 0 & sl >= 0 &
vsl >= 0 & (x1 >= xsl -> v1 <= vsl) & (xj >= slPos -> vj <= sl))->
(
(sl >=  0 &
(sl < (vj +1) -> (slPos >=  xj+1 + ((vj+1)^2) + ((MAXACCEL+1) + 1) * ((MAXACCEL+1) *TICK^2 +
TICK*(vj+1)))) &
(sl >= vj-1 -> (aj <= ((sl - vj) / TICK) - 2))) ->
(vsl >= 0 &
(vsl < v1 -> xsl >= x1 + (v1^2) + (A + 1) * (A * ep^2 + ep * v1)) &
(vsl >= v1 -> a1 <= (vsl - v1) / ep)))))
}
```