$$f(x,y) = \begin{cases} 0, \text{ se y} = 0 \\ x + f(x, y-1), \text{ caso contrário} \end{cases}$$

Seja $T := \lambda rmn.\, IFTE\ \ ISZERO\,(n)\ \ 0\ \ SOMA(m)(r\,(m)\,(pred\,n))$

A **Função multiplicação recursiva é:** é $MULT\_REC := M\ T$

$$\begin{aligned}
MULT_REC\ 3\ 2 &= M\ T\ 3\ 2 \\
&= T\ (M\ T)\ 3\ 2 \\
&\triangleright\ \lambda rmn.\, IFTE_lazy\ \ ISZERO_lazy\,(n)\ \ 0\ \ SOMA(m)(r\,(m)\,(PRED\,n))\ (M\ T)\ 3\ 2 \\
&\triangleright\ \lambda mn.\, IFTE_lazy\ \ ISZERO_lazy\,(n)\ \ 0\ \ SOMA(m)((M\ T)\,(m)\,(PRED\,n))\ 3\ 2 \\
&\triangleright\ \lambda n.\, IFTE_lazy\ \ ISZERO_lazy\,(n)\ \ 0\ \ SOMA(3)((M\ T)\,(3)\,(PRED\,n))\ 2 \\
&\triangleright\ IFTE_lazy\ \ ISZERO_lazy\,(2)\ \ 0\ \ SOMA(3)((M\ T)\,(3)\,(PRED\,2) \\
&\triangleright\ SOMA(3)((M\ T)\,(3)\,(PRED\,2)) \\
&\triangleright\ SOMA(3)(T\ (M\ T)\,3\,1) \\
&\triangleright\ SOMA(3)(\lambda rmn.\, IFTE_lazy\ \ ISZERO_lazy\,(n)\ \ 0\ \ SOMA(m)(r\,(m)\,(PRED\,n))\ (M\ T)\,3\,1) \\
&\triangleright\ SOMA(3)(\lambda mn.\, IFTE_lazy\ \ ISZERO_lazy\,(n)\ \ 0\ \ SOMA(m)((M\ T)\,(m)\,(PRED\,n))\,3\,1) \\
&\triangleright\ SOMA(3)(\lambda n.\, IFTE_lazy\ \ ISZERO_lazy\,(n)\ \ 0\ \ SOMA(3)((M\ T)\,(3)\,(PRED\,n))\,1) \\
&\triangleright\ SOMA(3)(IFTE_lazy\ \ ISZERO_lazy\,(1)\ \ 0\ \ SOMA(3)((M\ T)\,(3)\,(PRED\,1))) \\
&\triangleright\ SOMA(3)(SOMA(3)((M\ T)\,3\,0)) \\
&\triangleright\ SOMA(3)(SOMA(3)(T\ (M\ T)\,3\,0)) \\
&\triangleright\ SOMA(3)(SOMA(3)(\lambda rmn.\, IFTE_lazy\ \ ISZERO_lazy\,(n)\ \ 0\ \ SOMA(m)(r\,(m)\,(PRED\,n))\ (M\ T)\,3\,0)) \\
&\triangleright\ SOMA(3)(SOMA(3)(\lambda mn.\, IFTE_lazy\ \ ISZERO_lazy\,(n)\ \ 0\ \ SOMA(m)((M\ T)\,(m)\,(PRED\,n))\,3\,0)) \\
&\triangleright\ SOMA(3)(SOMA(3)(\lambda n.\, IFTE_lazy\ \ ISZERO_lazy\,(n)\ \ 0\ \ SOMA(3)((M\ T)\,(3)\,(PRED\,n))\,0)) \\
&\triangleright\ SOMA(3)(SOMA(3)(IFTE_lazy\ \ ISZERO_lazy\,(0)\ \ 0\ \ SOMA(3)((M\ T)\,(3)\,(PRED\,0)))) \\
&\triangleright\ SOMA(3)(SOMA(3)(0)) \\
&\triangleright\ SOMA(3)(3) \\
&\triangleright^{*}\ 6
\end{aligned}$$