

1 Types

* $(i \rightarrow (i \rightarrow i))$
1 i
< $(i \rightarrow (i \rightarrow o))$
= $(i \rightarrow (i \rightarrow o))$
> $(i \rightarrow (i \rightarrow o))$
 s_0 $((i \rightarrow o) \rightarrow i)$
 s_1 $(i \rightarrow i)$
 s_2 $(i \rightarrow i)$
 s_3 i

2 Clauses

$\langle\langle z_0 < s_0((\lambda x.(\neg X_0(x)))) \rangle\rangle^{(\lambda x.(\neg X_0(x))), z_0},$

\vdash
 $\langle X_0(y_0) \rangle^{(\lambda x.(\neg X_0(x))), y_0},$
 $\langle X_0(z_0) \rangle^{(\lambda x.(\neg X_0(x))), z_0},$

$\langle X_0(s_0((\lambda x.(\neg X_0(x)))) \rangle\rangle^{(\lambda x.(\neg X_0(x))),}$

\vdash
 $\langle X_0(y_0) \rangle^{(\lambda x.(\neg X_0(x))), y_0},$

$\langle (y_0 > 1) \rangle$

\vdash
 $\langle (y_0 > 1) \rangle$

$\langle ((nat_7 * nat_8) = y_0) \rangle$

\vdash
 $\langle ((nat_7 * nat_8) = y_0) \rangle$

$\langle (nat_7 = 1) \rangle$

\vdash
 $\langle (nat_7 = 1) \rangle$

$\langle (nat_7 = y_0) \rangle$

\vdash
 $\langle (nat_7 = y_0) \rangle$

\vdash
 $\langle ((y_0 * 1) = y_0) \rangle$

$\langle (y_0 > 1) \rangle$

\vdash
 $\langle (y_0 > 1) \rangle$

$\langle (y_0 > 1) \rangle$

$\langle ((z_0 * z_1) = y_0) \rangle$

\vdash
 $\langle (z_0 = 1) \rangle$

$\langle (z_0 = y_0) \rangle$

$\langle (z_0 < y_0) \rangle$

$\langle\langle(z_0 * z_1) = y_0\rangle\rangle$
 $\langle\langle y_0 > 1\rangle\rangle$
 \vdash
 $\langle\langle z_0 = 1\rangle\rangle$
 $\langle\langle z_0 > 1\rangle\rangle$

$\langle\langle w_0 > 1\rangle\rangle$
 \vdash
 $\langle\langle w_0 > 1\rangle\rangle$

$\langle\langle(nat_9 * nat_{10}) = w_0\rangle\rangle$
 \vdash
 $\langle\langle(nat_9 * nat_{10}) = w_0\rangle\rangle$

$\langle\langle nat_9 = 1\rangle\rangle$
 \vdash
 $\langle\langle nat_9 = 1\rangle\rangle$

$\langle\langle nat_9 = w_0\rangle\rangle$
 \vdash
 $\langle\langle nat_9 = w_0\rangle\rangle$

\vdash
 $\langle\langle(w_0 * (z_1 * z_2)) = ((w_0 * z_1) * z_2)\rangle\rangle$

$\langle\langle(w_0 * z_1) = z_0\rangle\rangle$
 \vdash
 $\langle\langle(w_0 * z_1) = z_0\rangle\rangle$

$\langle\langle(z_0 * z_2) = y_0\rangle\rangle$
 \vdash
 $\langle\langle(z_0 * z_2) = y_0\rangle\rangle$

$\langle\langle y_0 > 1\rangle\rangle$
 \vdash
 $\langle\langle y_0 > 1\rangle\rangle$

\vdash
 $\langle\langle s_3 > 1\rangle\rangle^{nat_3},$

$\langle\langle nat_3 > 1\rangle\rangle^{nat_3},$
 $\langle\langle(nat_3 * nat_6) = s_3\rangle\rangle^{nat_3, nat_6},$
 \vdash
 $\langle\langle(s_2(nat_3) * s_1(nat_3)) = nat_3\rangle\rangle^{nat_3},$

$\langle\langle nat_3 > 1\rangle\rangle^{nat_3},$
 $\langle\langle s_2(nat_3) = 1\rangle\rangle^{nat_3},$
 $\langle\langle(nat_3 * nat_6) = s_3\rangle\rangle^{nat_3, nat_6},$
 \vdash

$\langle (nat_3 > 1) \rangle^{nat_3},$
 $\langle (s_2(nat_3) = nat_3) \rangle^{nat_3},$
 $\langle ((nat_3 * nat_6) = s_3) \rangle^{nat_3, nat_6},$
 \vdash
