

LAMBDA

MODULE LAMBDA

SYNTAX $Val ::= Id$
 | $\lambda Id.Exp$ [binder]

SYNTAX $Exp ::= Val$
 | $Exp\ Exp$ [strict]
 | (Exp) [bracket]

SYNTAX $KResult ::= Val$

RULE
$$\frac{(\lambda X:Id.E:Exp)\ V:Val}{E[V\ /\ X]}$$

SYNTAX $Val ::= Int$
 | $Bool$

SYNTAX $Exp ::= Exp * Exp$ [strict]
 | Exp / Exp [strict]
 | $Exp + Exp$ [strict]
 | $Exp <= Exp$ [strict]

RULE
$$\frac{I1:Int * I2:Int}{I1 *_{Int} I2}$$

RULE
$$\frac{I1:Int / I2:Int}{I1 \div_{Int} I2}$$

RULE
$$\frac{I1:Int + I2:Int}{I1 +_{Int} I2}$$

RULE
$$\frac{I1:Int <= I2:Int}{I1 \leq_{Int} I2}$$

END MODULE