e ::= unreachable | nop | drop | select
| (block tf (e ...)) | (loop tf (e ...)) | (if tf (e ...) else (e ...))
| (br i) | (br-if i) | (br-table i i ...)
| return | (call i) | (call-indirect tf)
| (get-local i) | (set-local i) | (tee-local i)
| (get-global i) | (set-global i)
| (t load a o) | (t load (tp sx) a o) | (t store a o) | (t store tp a o)
| current-memory | grow-memory

| (inn $iunop$) | (fnn $funop$)
| (inn $ibinop$) | (fnn $fbinop$)
| (inn $itestop$)
| (inn $irelop$) | (fnn $frelop$)
| (t $cvtop$ t) | (t $cvtop$ t sx)

| (i32 const (side-condition $integer_1$ (<= 0 (term $integer_1$) (sub1 (expt 2 32)))))
| (i64 const (side-condition $integer_1$ (<= 0 (term $integer_1$) (sub1 (expt 2 64)))))
| (f32 const (side-condition $real_1$ (flsingle-flonum? (term $real_1$))))
| (f64 const (side-condition $real_1$ (flonum? (term $real_1$))))

inn ::= i32 | i64
fnn ::= f32 | f64
t ::= i32 | i64 | f32 | f64
tp ::= i8 | i16 | i32
tf ::= ((t ...) -> (t ...))
mut ::= const | var
tg ::= (mut t)
sx ::= signed | unsigned
$unop$ ::= $iunop$ | $funop$
$binop$ ::= $ibinop$ | $fbinop$
$testop$ ::= $itestop$
$relop$ ::= $irelop$ | $frelop$
$iunop$ ::= clz | ctz | popcnt
$ibinop$ ::= add | sub | mul | div-s | div-u | rem-s | rem-u
| and | or | xor | shl | shr-s | shr-u | rotl | rotr
$itestop$ ::= eqz
$irelop$ ::= eq | ne | lt-s | lt-u | gt-s | gt-u | le-s | le-u | ge-s | ge-u
$funop$ ::= abs | neg | sqrt | ceil | floor | nearest
$fbinop$ ::= add | sub | mul | div | min | max | copysign
$frelop$ ::= eq | ne | lt | gt | le | ge
$cvtop$ ::= convert | reinterpret
i, j, n, m ::= $natural$
a, o ::= (side-condition $natural_1$ (<= 0 (term $natural_1$) (sub1 (expt 2 32))))
c, k ::= $real$
f ::= ((ex ...) (func tf (local (t ...) (e ...))))
| ((ex ...) (func tf im))
$glob$ ::= ((ex ...) (global tg (e ...)))
| ((ex ...) (global tg im))
tab ::= ((ex ...) (table n i ...))
| ((ex ...) (table n im))
mem ::= ((ex ...) (memory n))
| ((ex ...) (memory n im))
im ::= (import $string$ $string$)
ex ::= (export $string$)
mod ::= (module (f ...) ($glob$ ...) (tab ...) (mem ...))