

v3/crypto.pro demo

Welcome to SWI-Prolog (Multi-threaded, 64 bits, Version 7.2.2)

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For help, use `?- help(Topic).` or `?- apropos(Word).`

`?- consult('v3/crypto.pro').`

true.

`?- crypto(2,4,8,16,32,6,X).`

`X = ex(ex(16, -, ex(2, +, 4)), -, ex(32, /, 8)) ;`

`X = ex(16, -, ex(ex(2, +, 4), +, ex(32, /, 8))) ;`

`X = ex(ex(16, -, ex(32, /, 8)), -, ex(2, +, 4)) ;`

`X = ex(ex(16, -, ex(2, +, 4)), -, ex(32, /, 8)) ;`

`X = ex(ex(ex(2, *, 4), +, 16), /, ex(32, /, 8)) ;`

`X = ex(ex(8, +, 16), /, ex(32, /, ex(2, *, 4))) ;`

`X = ex(ex(ex(2, *, 4), *, ex(8, +, 16)), /, 32) ;`

`X = ex(ex(8, *, ex(ex(2, *, 4), +, 16)), /, 32) ;`

`X = ex(ex(16, /, ex(2, *, 4)), +, ex(32, /, 8)) ;`

`X = ex(ex(16, /, 8), +, ex(32, /, ex(2, *, 4))) ;`

`X = ex(ex(16, +, ex(2, *, 4)), /, ex(32, /, 8)) .`

`?- crypto(0,0,0,0,4,4,X).`

`X = ex(ex(ex(0, +, 0), +, 0), +, ex(4, +, 0)) ;`

`X = ex(ex(0, +, ex(0, +, 0)), +, ex(4, +, 0)) ;`

`X = ex(ex(0, +, 0), +, ex(4, +, ex(0, +, 0))) ;`

`X = ex(ex(0, +, 0), +, ex(4, +, ex(0, +, 0))) ;`

`X = ex(0, +, ex(4, +, ex(ex(0, +, 0), +, 0))) ;`

`X = ex(0, +, ex(4, +, ex(0, +, ex(0, +, 0)))) ;`

`X = ex(ex(4, +, ex(0, +, 0)), -, ex(0, +, 0)) ;`

`X = ex(ex(4, +, 0), -, ex(ex(0, +, 0), +, 0)) ;`

`X = ex(ex(4, +, 0), -, ex(0, +, ex(0, +, 0))) ;`

`X = ex(ex(4, +, ex(0, +, 0)), -, ex(0, +, 0)) ;`

`X = ex(ex(4, +, ex(ex(0, +, 0), +, 0)), -, 0) ;`

$X = \text{ex}(\text{ex}(4, +, \text{ex}(0, +, \text{ex}(0, +, 0))), -, 0) ;$
 $X = \text{ex}(\text{ex}(\text{ex}(0, +, 0), +, 0), +, \text{ex}(4, -, 0)) .$

?- `crypto(0,0,0,0,4,1,X).`

false.

?- `halt.`