```
$ pl

<...snip...>

?- consult('crypto.pro').
%  combosets.pro compiled 0.01 sec, 7,160 bytes
% crypto.pro compiled 0.01 sec, 10,556 bytes

Yes
?- crypto(1,2,3,4,5,15,Soln),write(Soln),nl,fail.
ex(ex(ex(1, +, 2), +, 4), +, ex(5, +, 3))
ex(ex(3, +, 4), +, ex(5, +, ex(1, +, 2)))
ex(5, +, ex(ex(1, +, 2), +, ex(3, +, 4)))
ex(5, +, ex(3, +, ex(ex(1, +, 2), +, 4)))
ex(ex(1, +, 2), +, ex(5, +, ex(3, +, 4)))
ex(3, +, ex(5, +, ex(ex(1, +, 2), +, 4)))
ex(ex(4, -, ex(1, +, 2)), *, ex(5, *, 3))
ex(ex(4, -, 3), *, ex(5, *, ex(1, +, 2)))
ex(ex(5, *, ex(1, +, 2)), /, ex(4, -, 3))
ex(ex(5, *, 3), /, ex(4, -, ex(1, +, 2)))
ex(5, *, ex(ex(1, +, 2), *, ex(4, -, 3)))
ex(5, *, ex(3, *, ex(4, -, ex(1, +, 2))))
ex(5, *, ex(ex(1, +, 2), /, ex(4, -, 3)))
ex(5, *, ex(3, /, ex(4, -, ex(1, +, 2))))
ex(ex(1, +, 2), *, ex(5, *, ex(4, -, 3)))
ex(3, *, ex(5, *, ex(4, -, ex(1, +, 2))))
ex(ex(1, +, 2), *, ex(5, /, ex(4, -, 3)))
ex(3, *, ex(5, /, ex(4, -, ex(1, +, 2))))
ex(ex(ex(1, +, 2), +, 5), +, ex(4, +, 3))
ex(ex(3, +, 5), +, ex(4, +, ex(1, +, 2)))
ex(4, +, ex(ex(1, +, 2), +, ex(3, +, 5)))
ex(4, +, ex(3, +, ex(ex(1, +, 2), +, 5)))
ex(ex(1, +, 2), +, ex(4, +, ex(3, +, 5)))
ex(3, +, ex(4, +, ex(ex(1, +, 2), +, 5)))
ex(ex(ex(1, +, 2), *, 5), *, ex(4, -, 3))
ex(ex(3, *, 5), *, ex(4, -, ex(1, +, 2)))
ex(ex(ex(1, +, 2), *, 5), /, ex(4, -, 3))
ex(ex(3, *, 5), /, ex(4, -, ex(1, +, 2)))
ex(ex(ex(1, +, 2), +, 3), +, ex(4, +, 5))
ex(ex(3, +, ex(1, +, 2)), +, ex(4, +, 5))
ex(4, +, ex(5, +, ex(ex(1, +, 2), +, 3)))
ex(4, +, ex(5, +, ex(3, +, ex(1, +, 2))))
ex(5, +, ex(4, +, ex(ex(1, +, 2), +, 3)))
ex(5, +, ex(4, +, ex(3, +, ex(1, +, 2))))
ex(5, *, ex(4, -, ex(ex(1, +, 2), /, 3)))
ex(5, *, ex(4, -, ex(3, /, ex(1, +, 2))))
ex(5, *, ex(4, -, ex(ex(1, +, 2), /, 3)))
ex(5, *, ex(4, -, ex(3, /, ex(1, +, 2))))
ex(ex(4, +, 5), +, ex(ex(1, +, 2), +, 3))
ex(ex(4, +, 5), +, ex(3, +, ex(1, +, 2)))
ex(ex(1, +, 2), +, ex(3, +, ex(4, +, 5)))
ex(3, +, ex(ex(1, +, 2), +, ex(4, +, 5)))
ex(ex(1, +, 2), +, ex(3, +, ex(4, +, 5)))
ex(3, +, ex(ex(1, +, 2), +, ex(4, +, 5)))
ex(ex(4, +, ex(1, +, 2)), +, ex(3, +, 5))
ex(ex(4, +, 3), +, ex(ex(1, +, 2), +, 5))
ex(ex(1, +, 2), +, ex(5, +, ex(4, +, 3)))
ex(3, +, ex(5, +, ex(4, +, ex(1, +, 2))))
ex(5, +, ex(ex(1, +, 2), +, ex(4, +, 3)))
ex(5, +, ex(3, +, ex(4, +, ex(1, +, 2))))
ex(ex(4, -, ex(1, +, 2)), *, ex(3, *, 5))
ex(ex(4, -, 3), *, ex(ex(1, +, 2), *, 5))
ex(ex(ex(1, +, 2), *, 5), /, ex(4, -, 3))
ex(ex(3, *, 5), /, ex(4, -, ex(1, +, 2)))
ex(ex(1, +, 2), *, ex(5, *, ex(4, -, 3)))
ex(3, *, ex(5, *, ex(4, -, ex(1, +, 2))))
ex(ex(1, +, 2), *, ex(5, /, ex(4, -, 3)))
ex(3, *, ex(5, /, ex(4, -, ex(1, +, 2))))
```

```
ex(5, *, ex(ex(1, +, 2), *, ex(4, -, 3)))
ex(5, *, ex(3, *, ex(4, -, ex(1, +, 2))))
ex(5, *, ex(ex(1, +, 2), /, ex(4, -, 3)))
ex(5, *, ex(3, /, ex(4, -, ex(1, +, 2))))
ex(ex(5, +, ex(1, +, 2)), +, ex(3, +, 4))
ex(ex(5, +, 3), +, ex(ex(1, +, 2), +, 4))
ex(ex(1, +, 2), +, ex(4, +, ex(5, +, 3)))
ex(3, +, ex(4, +, ex(5, +, ex(1, +, 2))))
ex(4, +, ex(ex(1, +, 2), +, ex(5, +, 3)))
ex(4, +, ex(3, +, ex(5, +, ex(1, +, 2))))
ex(ex(5, *, ex(1, +, 2)), *, ex(4, -, 3))
ex(ex(5, *, 3), *, ex(4, -, ex(1, +, 2)))
ex(ex(5, *, ex(1, +, 2)), /, ex(4, -, 3))
ex(ex(5, *, 3), /, ex(4, -, ex(1, +, 2)))
ex(ex(3, *, 4), +, ex(5, -, ex(1, *, 2)))
ex(ex(3, *, 4), -, ex(ex(1, *, 2), -, 5))
ex(5, -, ex(ex(1, *, 2), -, ex(3, *, 4)))
ex(5, +, ex(ex(3, *, 4), -, ex(1, *, 2)))
ex(ex(5, +, ex(3, *, 4)), -, ex(1, *, 2))
ex(5, *, ex(ex(1, *, 2), -, ex(3, -, 4)))
ex(5, *, ex(ex(1, *, 2), +, ex(4, -, 3)))
ex(ex(4, *, 5), -, ex(3, +, ex(1, *, 2)))
ex(ex(4, *, ex(3, +, ex(1, *, 2))), -, 5)
ex(ex(4, *, 5), -, ex(3, +, ex(1, *, 2)))
ex(ex(4, *, ex(3, +, ex(1, *, 2))), -, 5)
ex(ex(3, *, ex(1, *, 2)), +, ex(4, +, 5))
ex(4, +, ex(5, +, ex(3, *, ex(1, *, 2))))
ex(5, +, ex(4, +, ex(3, *, ex(1, *, 2))))
ex(5, *, ex(4, -, ex(3, -, ex(1, *, 2))))
ex(5, *, ex(4, +, ex(ex(1, *, 2), -, 3)))
ex(ex(4, +, 5), +, ex(3, *, ex(1, *, 2)))
ex(ex(ex(1, *, 2), *, ex(4, +, 5)), -, 3)
ex(ex(4, *, 5), -, ex(3, +, ex(1, *, 2)))
ex(ex(ex(4, *, 5), -, ex(1, *, 2)), -, 3)
ex(ex(ex(4, *, 5), -, 3), -, ex(1, *, 2))
ex(5, *, ex(ex(4, +, ex(1, *, 2)), -, 3))
ex(ex(5, -, ex(1, *, 2)), +, ex(3, *, 4))
ex(3, +, ex(ex(5, -, ex(1, *, 2)), *, 4))
ex(ex(5, -, ex(1, *, 2)), +, ex(4, *, 3))
ex(3, +, ex(4, *, ex(5, -, ex(1, *, 2))))
ex(ex(3, *, 4), -, ex(ex(1, *, 2), -, 5))
ex(3, -, ex(4, *, ex(ex(1, *, 2), -, 5)))
ex(ex(3, *, 4), +, ex(5, -, ex(2, /, 1)))
ex(ex(3, *, 4), -, ex(ex(2, /, 1), -, 5))
ex(5, -, ex(ex(2, /, 1), -, ex(3, *, 4)))
ex(5, +, ex(ex(3, *, 4), -, ex(2, /, 1)))
ex(ex(5, +, ex(3, *, 4)), -, ex(2, /, 1))
ex(5, *, ex(ex(2, /, 1), -, ex(3, -, 4)))
ex(5, *, ex(ex(2, /, 1), +, ex(4, -, 3)))
ex(ex(4, *, 5), -, ex(3, +, ex(2, /, 1)))
ex(ex(4, *, ex(3, +, ex(2, /, 1))), -, 5)
ex(ex(4, *, 5), -, ex(3, +, ex(2, /, 1)))
ex(ex(4, *, ex(3, +, ex(2, /, 1))), -, 5)
ex(ex(3, *, ex(2, /, 1)), +, ex(4, +, 5))
ex(4, +, ex(5, +, ex(3, *, ex(2, /, 1))))
ex(5, +, ex(4, +, ex(3, *, ex(2, /, 1))))
ex(5, *, ex(4, -, ex(3, -, ex(2, /, 1))))
ex(5, *, ex(4, +, ex(ex(2, /, 1), -, 3)))
ex(ex(4, +, 5), +, ex(3, *, ex(2, /, 1)))
ex(ex(ex(2, /, 1), *, ex(4, +, 5)), -, 3)
ex(ex(4, *, 5), -, ex(3, +, ex(2, /, 1)))
ex(ex(ex(4, *, 5), -, ex(2, /, 1)), -, 3)
ex(ex(ex(4, *, 5), -, 3), -, ex(2, /, 1))
ex(5, *, ex(ex(4, +, ex(2, /, 1)), -, 3))
ex(ex(5, -, ex(2, /, 1)), +, ex(3, *, 4))
ex(3, +, ex(ex(5, -, ex(2, /, 1)), *, 4))
ex(ex(5, -, ex(2, /, 1)), +, ex(4, *, 3))
ex(3, +, ex(4, *, ex(5, -, ex(2, /, 1))))
```

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ex(ex(3, *, 4), -, ex(ex(2, /, 1), -, 5))
ex(3, -, ex(4, *, ex(ex(2, /, 1), -, 5)))
ex(ex(2, +, ex(1, +, 3)), +, ex(5, +, 4))
ex(ex(2, +, 4), +, ex(5, +, ex(1, +, 3)))
ex(5, +, ex(ex(1, +, 3), +, ex(2, +, 4)))
ex(5, +, ex(4, +, ex(2, +, ex(1, +, 3))))
ex(ex(1, +, 3), +, ex(5, +, ex(2, +, 4)))
ex(4, +, ex(5, +, ex(2, +, ex(1, +, 3))))
ex(ex(2, +, 5), +, ex(ex(1, +, 3), +, 4))
ex(ex(2, +, 5), +, ex(4, +, ex(1, +, 3)))
ex(ex(1, +, 3), +, ex(4, +, ex(2, +, 5)))
ex(4, +, ex(ex(1, +, 3), +, ex(2, +, 5)))
ex(ex(1, +, 3), +, ex(4, +, ex(2, +, 5)))
ex(4, +, ex(ex(1, +, 3), +, ex(2, +, 5)))
ex(ex(2, +, ex(1, +, 3)), +, ex(4, +, 5))
ex(ex(2, +, 4), +, ex(ex(1, +, 3), +, 5))
ex(ex(1, +, 3), +, ex(5, +, ex(2, +, 4)))
ex(4, +, ex(5, +, ex(2, +, ex(1, +, 3))))
ex(5, +, ex(ex(1, +, 3), +, ex(2, +, 4)))
ex(5, +, ex(4, +, ex(2, +, ex(1, +, 3))))
ex(ex(ex(1, +, 3), +, 5), +, ex(2, +, 4))
ex(ex(4, +, 5), +, ex(2, +, ex(1, +, 3)))
ex(2, +, ex(ex(1, +, 3), +, ex(4, +, 5)))
ex(2, +, ex(4, +, ex(ex(1, +, 3), +, 5)))
ex(ex(1, +, 3), +, ex(2, +, ex(4, +, 5)))
ex(4, +, ex(2, +, ex(ex(1, +, 3), +, 5)))
ex(ex(ex(1, +, 3), +, 4), +, ex(2, +, 5))
ex(ex(4, +, ex(1, +, 3)), +, ex(2, +, 5))
ex(2, +, ex(5, +, ex(ex(1, +, 3), +, 4)))
ex(2, +, ex(5, +, ex(4, +, ex(1, +, 3))))
ex(5, +, ex(2, +, ex(ex(1, +, 3), +, 4)))
ex(5, +, ex(2, +, ex(4, +, ex(1, +, 3))))
ex(5, *, ex(2, +, ex(ex(1, +, 3), /, 4)))
ex(5, *, ex(2, +, ex(4, /, ex(1, +, 3))))
ex(5, *, ex(2, +, ex(ex(1, +, 3), /, 4)))
ex(5, *, ex(2, +, ex(4, /, ex(1, +, 3))))
ex(ex(5, +, ex(1, +, 3)), +, ex(2, +, 4))
ex(ex(5, +, 4), +, ex(2, +, ex(1, +, 3)))
ex(2, +, ex(ex(1, +, 3), +, ex(5, +, 4)))
ex(2, +, ex(4, +, ex(5, +, ex(1, +, 3))))
ex(ex(1, +, 3), +, ex(2, +, ex(5, +, 4)))
ex(4, +, ex(2, +, ex(5, +, ex(1, +, 3))))
ex(5, *, ex(ex(2, +, 4), -, ex(1, *, 3)))
ex(ex(4, *, ex(1, *, 3)), -, ex(2, -, 5))
ex(ex(1, *, 3), -, ex(4, *, ex(2, -, 5)))
ex(ex(5, -, 2), +, ex(4, *, ex(1, *, 3)))
ex(ex(1, *, 3), +, ex(4, *, ex(5, -, 2)))
ex(ex(5, -, 2), +, ex(4, *, ex(1, *, 3)))
ex(ex(1, *, 3), +, ex(4, *, ex(5, -, 2)))
ex(ex(4, *, 5), -, ex(2, +, ex(1, *, 3)))
ex(ex(4, *, ex(2, +, ex(1, *, 3))), -, 5)
ex(ex(4, *, 5), -, ex(2, +, ex(1, *, 3)))
ex(ex(4, *, ex(2, +, ex(1, *, 3))), -, 5)
ex(ex(2, *, ex(1, *, 3)), +, ex(4, +, 5))
ex(4, +, ex(5, +, ex(2, *, ex(1, *, 3))))
ex(5, +, ex(4, +, ex(2, *, ex(1, *, 3))))
ex(5, *, ex(4, +, ex(2, -, ex(1, *, 3))))
ex(5, *, ex(4, -, ex(ex(1, *, 3), -, 2)))
ex(ex(4, +, 5), +, ex(2, *, ex(1, *, 3)))
ex(ex(2, *, ex(4, +, 5)), -, ex(1, *, 3))
ex(ex(4, *, 5), -, ex(2, +, ex(1, *, 3)))
ex(ex(ex(4, *, 5), -, ex(1, *, 3)), -, 2)
ex(ex(ex(4, *, 5), -, 2), -, ex(1, *, 3))
ex(ex(4, *, ex(1, *, 3)), -, ex(2, -, 5))
ex(ex(4, *, ex(1, *, 3)), +, ex(5, -, 2))
ex(ex(5, +, ex(4, *, ex(1, *, 3))), -, 2)
ex(5, -, ex(2, -, ex(4, *, ex(1, *, 3))))
ex(5, +, ex(ex(4, *, ex(1, *, 3)), -, 2))
```

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ex(5, *, ex(2, +, ex(4, -, ex(1, *, 3)))))
ex(5, *, ex(2, -, ex(ex(1, *, 3), -, 4)))
ex(ex(2, *, 4), +, ex(5, -, ex(1, -, 3)))
ex(ex(2, *, 4), -, ex(ex(1, -, 3), -, 5))
ex(5, -, ex(ex(1, -, 3), -, ex(2, *, 4)))
ex(5, +, ex(ex(2, *, 4), -, ex(1, -, 3)))
ex(ex(5, +, ex(2, *, 4)), -, ex(1, -, 3))
ex(ex(2, +, 5), -, ex(4, *, ex(1, -, 3)))
ex(5, *, ex(4, +, ex(ex(1, -, 3), /, 2)))
ex(ex(2, +, 5), -, ex(4, *, ex(1, -, 3)))
ex(2, +, ex(5, -, ex(4, *, ex(1, -, 3))))
ex(2, -, ex(ex(4, *, ex(1, -, 3)), -, 5))
ex(5, +, ex(2, -, ex(4, *, ex(1, -, 3))))
ex(5, -, ex(ex(4, *, ex(1, -, 3)), -, 2))
ex(ex(5, *, ex(4, -, ex(1, -, 3))), /, 2)
ex(5, *, ex(ex(4, -, ex(1, -, 3)), /, 2))
ex(ex(5, -, ex(1, -, 3)), +, ex(2, *, 4))
ex(ex(2, *, 4), -, ex(ex(1, -, 3), -, 5))
ex(5, *, ex(ex(2, +, 4), /, ex(3, -, 1)))
ex(5, *, ex(ex(ex(3, -, 1), +, 4), /, 2))
ex(ex(5, *, ex(2, +, 4)), /, ex(3, -, 1))
ex(ex(5, *, ex(ex(3, -, 1), +, 4)), /, 2)
ex(ex(ex(3, -, 1), *, 4), +, ex(5, +, 2))
ex(ex(2, *, 4), +, ex(5, +, ex(3, -, 1)))
ex(5, +, ex(ex(3, -, 1), +, ex(2, *, 4)))
ex(5, +, ex(2, +, ex(ex(3, -, 1), *, 4)))
ex(ex(3, -, 1), +, ex(5, +, ex(2, *, 4)))
ex(2, +, ex(5, +, ex(ex(3, -, 1), *, 4)))
ex(ex(ex(3, -, 1), +, 5), +, ex(4, *, 2))
ex(ex(2, +, 5), +, ex(4, *, ex(3, -, 1)))
ex(5, *, ex(4, -, ex(ex(3, -, 1), /, 2)))
ex(5, *, ex(4, -, ex(2, /, ex(3, -, 1))))
ex(5, *, ex(4, -, ex(ex(3, -, 1), /, 2)))
ex(5, *, ex(4, -, ex(2, /, ex(3, -, 1))))
ex(ex(5, *, ex(4, +, 2)), /, ex(3, -, 1))
ex(ex(5, *, ex(4, +, ex(3, -, 1))), /, 2)
ex(5, *, ex(ex(4, +, 2), /, ex(3, -, 1)))
ex(5, *, ex(ex(4, +, ex(3, -, 1)), /, 2))
ex(ex(4, *, ex(3, -, 1)), +, ex(2, +, 5))
ex(ex(4, *, 2), +, ex(ex(3, -, 1), +, 5))
ex(ex(3, -, 1), +, ex(5, +, ex(4, *, 2)))
ex(2, +, ex(5, +, ex(4, *, ex(3, -, 1))))
ex(5, +, ex(ex(3, -, 1), +, ex(4, *, 2)))
ex(5, +, ex(2, +, ex(4, *, ex(3, -, 1))))
ex(ex(5, +, ex(3, -, 1)), +, ex(2, *, 4))
ex(ex(5, +, 2), +, ex(ex(3, -, 1), *, 4))
ex(5, *, ex(ex(2, +, 4), -, ex(3, /, 1)))
ex(ex(4, *, ex(3, /, 1)), -, ex(2, -, 5))
ex(ex(3, /, 1), -, ex(4, *, ex(2, -, 5)))
ex(ex(5, -, 2), +, ex(4, *, ex(3, /, 1)))
ex(ex(3, /, 1), +, ex(4, *, ex(5, -, 2)))
ex(ex(5, -, 2), +, ex(4, *, ex(3, /, 1)))
ex(ex(3, /, 1), +, ex(4, *, ex(5, -, 2)))
ex(ex(4, *, 5), -, ex(2, +, ex(3, /, 1)))
ex(ex(4, *, ex(2, +, ex(3, /, 1))), -, 5)
ex(ex(4, *, 5), -, ex(2, +, ex(3, /, 1)))
ex(ex(4, *, ex(2, +, ex(3, /, 1))), -, 5)
ex(ex(2, *, ex(3, /, 1)), +, ex(4, +, 5))
ex(4, +, ex(5, +, ex(2, *, ex(3, /, 1))))
ex(5, +, ex(4, +, ex(2, *, ex(3, /, 1))))
ex(5, *, ex(4, +, ex(2, -, ex(3, /, 1))))
ex(5, *, ex(4, -, ex(ex(3, /, 1), -, 2)))
ex(ex(4, +, 5), +, ex(2, *, ex(3, /, 1)))
ex(ex(2, *, ex(4, +, 5)), -, ex(3, /, 1))
ex(ex(4, *, 5), -, ex(2, +, ex(3, /, 1)))
ex(ex(ex(4, *, 5), -, ex(3, /, 1)), -, 2)
ex(ex(ex(4, *, 5), -, 2), -, ex(3, /, 1))
ex(ex(4, *, ex(3, /, 1)), -, ex(2, -, 5))
```

```
ex(ex(4, *, ex(3, /, 1)), +, ex(5, -, 2))
ex(ex(5, +, ex(4, *, ex(3, /, 1))), -, 2)
ex(5, -, ex(2, -, ex(4, *, ex(3, /, 1))))
ex(5, +, ex(ex(4, *, ex(3, /, 1)), -, 2))
ex(5, *, ex(2, +, ex(4, -, ex(3, /, 1))))
ex(5, *, ex(2, -, ex(ex(3, /, 1), -, 4)))
ex(ex(2, +, 3), +, ex(ex(1, +, 4), +, 5))
ex(ex(2, +, 3), +, ex(5, +, ex(1, +, 4)))
ex(ex(1, +, 4), +, ex(ex(2, +, 3), +, 5))
ex(5, +, ex(ex(2, +, 3), +, ex(1, +, 4)))
ex(ex(1, +, 4), +, ex(5, +, ex(2, +, 3)))
ex(5, +, ex(ex(1, +, 4), +, ex(2, +, 3)))
ex(ex(2, +, 3), +, ex(ex(1, +, 4), +, 5))
ex(ex(2, +, 3), +, ex(5, +, ex(1, +, 4)))
ex(ex(1, +, 4), +, ex(ex(2, +, 3), +, 5))
ex(5, +, ex(ex(2, +, 3), +, ex(1, +, 4)))
ex(ex(1, +, 4), +, ex(5, +, ex(2, +, 3)))
ex(5, +, ex(ex(1, +, 4), +, ex(2, +, 3)))
ex(ex(2, +, 3), +, ex(ex(1, +, 4), +, 5))
ex(ex(2, +, 3), +, ex(5, +, ex(1, +, 4)))
ex(ex(1, +, 4), +, ex(ex(2, +, 3), +, 5))
ex(5, +, ex(ex(2, +, 3), +, ex(1, +, 4)))
ex(ex(1, +, 4), +, ex(5, +, ex(2, +, 3)))
ex(5, +, ex(ex(1, +, 4), +, ex(2, +, 3)))
ex(ex(2, +, ex(1, +, 4)), +, ex(3, +, 5))
ex(ex(2, +, 5), +, ex(3, +, ex(1, +, 4)))
ex(3, +, ex(ex(1, +, 4), +, ex(2, +, 5)))
ex(3, +, ex(5, +, ex(2, +, ex(1, +, 4))))
ex(ex(1, +, 4), +, ex(3, +, ex(2, +, 5)))
ex(5, +, ex(3, +, ex(2, +, ex(1, +, 4))))
ex(3, *, ex(ex(2, *, 5), -, ex(1, +, 4)))
ex(3, *, ex(ex(2, *, ex(1, +, 4)), -, 5))
ex(ex(2, +, ex(1, +, 4)), +, ex(3, +, 5))
ex(ex(2, +, 5), +, ex(3, +, ex(1, +, 4)))
ex(3, +, ex(ex(1, +, 4), +, ex(2, +, 5)))
ex(3, +, ex(5, +, ex(2, +, ex(1, +, 4))))
ex(ex(1, +, 4), +, ex(3, +, ex(2, +, 5)))
ex(5, +, ex(3, +, ex(2, +, ex(1, +, 4))))
ex(3, *, ex(ex(2, *, 5), -, ex(1, +, 4)))
ex(3, *, ex(ex(2, *, ex(1, +, 4)), -, 5))
ex(ex(3, +, ex(1, +, 4)), +, ex(2, +, 5))
ex(ex(3, +, 5), +, ex(2, +, ex(1, +, 4)))
ex(2, +, ex(ex(1, +, 4), +, ex(3, +, 5)))
ex(2, +, ex(5, +, ex(3, +, ex(1, +, 4))))
ex(ex(1, +, 4), +, ex(2, +, ex(3, +, 5)))
ex(5, +, ex(2, +, ex(3, +, ex(1, +, 4))))
ex(ex(3, +, ex(1, +, 4)), +, ex(2, +, 5))
ex(ex(3, +, 5), +, ex(2, +, ex(1, +, 4)))
ex(2, +, ex(ex(1, +, 4), +, ex(3, +, 5)))
ex(2, +, ex(5, +, ex(3, +, ex(1, +, 4))))
ex(ex(1, +, 4), +, ex(2, +, ex(3, +, 5)))
ex(5, +, ex(2, +, ex(3, +, ex(1, +, 4))))
ex(ex(ex(1, +, 4), +, 5), +, ex(2, +, 3))
ex(ex(5, +, ex(1, +, 4)), +, ex(2, +, 3))
ex(2, +, ex(3, +, ex(ex(1, +, 4), +, 5)))
ex(2, +, ex(3, +, ex(5, +, ex(1, +, 4))))
ex(ex(3, *, ex(ex(1, +, 4), +, 5)), /, 2)
ex(ex(3, *, ex(5, +, ex(1, +, 4))), /, 2)
ex(3, +, ex(2, +, ex(ex(1, +, 4), +, 5)))
ex(3, +, ex(2, +, ex(5, +, ex(1, +, 4))))
ex(3, *, ex(ex(ex(1, +, 4), +, 5), /, 2))
ex(3, *, ex(ex(5, +, ex(1, +, 4)), /, 2))
ex(ex(5, *, ex(1, *, 4)), -, ex(2, +, 3))
ex(ex(ex(2, +, 3), *, ex(1, *, 4)), -, 5)
ex(ex(ex(1, *, 4), *, 5), -, ex(2, +, 3))
ex(ex(ex(1, *, 4), *, ex(2, +, 3)), -, 5)
ex(ex(2, *, 3), +, ex(5, +, ex(1, *, 4)))
ex(5, +, ex(ex(1, *, 4), +, ex(2, *, 3)))
```

```
ex(ex(1, *, 4), +, ex(5, +, ex(2, *, 3)))
ex(5, *, ex(ex(1, *, 4), +, ex(2, -, 3)))
ex(5, *, ex(ex(1, *, 4), -, ex(3, -, 2)))
ex(ex(3, *, ex(1, *, 4)), -, ex(2, -, 5))
ex(3, -, ex(ex(1, *, 4), *, ex(2, -, 5)))
ex(ex(5, -, 2), +, ex(3, *, ex(1, *, 4)))
ex(3, +, ex(ex(5, -, 2), *, ex(1, *, 4)))
ex(ex(5, -, 2), +, ex(ex(1, *, 4), *, 3))
ex(3, +, ex(ex(1, *, 4), *, ex(5, -, 2)))
ex(5, *, ex(ex(2, +, ex(1, *, 4)), -, 3))
ex(ex(3, *, ex(1, *, 4)), -, ex(2, -, 5))
ex(ex(3, *, ex(1, *, 4)), +, ex(5, -, 2))
ex(ex(5, +, ex(3, *, ex(1, *, 4))), -, 2)
ex(5, -, ex(2, -, ex(3, *, ex(1, *, 4))))
ex(5, +, ex(ex(3, *, ex(1, *, 4)), -, 2))
ex(5, *, ex(2, -, ex(3, -, ex(1, *, 4))))
ex(5, *, ex(2, +, ex(ex(1, *, 4), -, 3)))
ex(ex(5, +, ex(1, *, 4)), +, ex(2, *, 3))
ex(ex(2, *, ex(5, +, ex(1, *, 4))), -, 3)
ex(ex(5, *, ex(1, *, 4)), -, ex(2, +, 3))
ex(ex(ex(5, *, ex(1, *, 4)), -, 3), -, 2)
ex(ex(ex(5, *, ex(1, *, 4)), -, 2), -, 3)
ex(5, *, ex(ex(1, -, 4), +, ex(2, *, 3)))
ex(ex(2, -, 3), *, ex(5, *, ex(1, -, 4)))
ex(5, *, ex(ex(1, -, 4), *, ex(2, -, 3)))
ex(ex(1, -, 4), *, ex(5, *, ex(2, -, 3)))
ex(ex(5, *, ex(3, -, ex(1, -, 4))), /, 2)
ex(5, *, ex(ex(3, -, ex(1, -, 4)), /, 2))
ex(5, *, ex(2, -, ex(ex(1, -, 4), /, 3)))
ex(ex(5, *, ex(1, -, 4)), *, ex(2, -, 3))
ex(5, *, ex(ex(2, *, 3), -, ex(4, -, 1)))
ex(5, *, ex(ex(2, *, ex(4, -, 1)), -, 3))
ex(ex(ex(4, -, 1), -, 2), *, ex(5, *, 3))
ex(ex(3, -, 2), *, ex(5, *, ex(4, -, 1)))
ex(ex(5, *, ex(4, -, 1)), /, ex(3, -, 2))
ex(ex(5, *, 3), /, ex(ex(4, -, 1), -, 2))
ex(5, *, ex(ex(4, -, 1), *, ex(3, -, 2)))
ex(5, *, ex(3, *, ex(ex(4, -, 1), -, 2)))
ex(5, *, ex(ex(4, -, 1), /, ex(3, -, 2)))
ex(5, *, ex(3, /, ex(ex(4, -, 1), -, 2)))
ex(ex(4, -, 1), *, ex(5, *, ex(3, -, 2)))
ex(3, *, ex(5, *, ex(ex(4, -, 1), -, 2)))
ex(ex(4, -, 1), *, ex(5, /, ex(3, -, 2)))
ex(3, *, ex(5, /, ex(ex(4, -, 1), -, 2)))
ex(5, *, ex(ex(2, *, 3), -, ex(4, -, 1)))
ex(5, *, ex(ex(2, *, ex(4, -, 1)), -, 3))
ex(ex(ex(4, -, 1), -, 2), *, ex(3, *, 5))
ex(ex(3, -, 2), *, ex(ex(4, -, 1), *, 5))
ex(ex(ex(4, -, 1), *, 5), /, ex(3, -, 2))
ex(ex(3, *, 5), /, ex(ex(4, -, 1), -, 2))
ex(ex(4, -, 1), *, ex(5, *, ex(3, -, 2)))
ex(3, *, ex(5, *, ex(ex(4, -, 1), -, 2)))
ex(ex(4, -, 1), *, ex(5, /, ex(3, -, 2)))
ex(3, *, ex(5, /, ex(ex(4, -, 1), -, 2)))
ex(5, *, ex(ex(4, -, 1), *, ex(3, -, 2)))
ex(5, *, ex(3, *, ex(ex(4, -, 1), -, 2)))
ex(5, *, ex(ex(4, -, 1), /, ex(3, -, 2)))
ex(5, *, ex(3, /, ex(ex(4, -, 1), -, 2)))
ex(ex(ex(4, -, 1), *, 5), *, ex(3, -, 2))
ex(ex(3, *, 5), *, ex(ex(4, -, 1), -, 2))
ex(ex(ex(4, -, 1), *, 5), /, ex(3, -, 2))
ex(ex(3, *, 5), /, ex(ex(4, -, 1), -, 2))
ex(ex(5, *, ex(ex(4, -, 1), +, 3)), /, 2)
ex(ex(5, *, ex(3, +, ex(4, -, 1))), /, 2)
ex(5, *, ex(ex(ex(4, -, 1), +, 3), /, 2))
ex(5, *, ex(ex(3, +, ex(4, -, 1)), /, 2))
ex(5, *, ex(2, +, ex(ex(4, -, 1), /, 3)))
ex(5, *, ex(2, +, ex(3, /, ex(4, -, 1))))
```

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ex(5, *, ex(2, +, ex(ex(4, -, 1), /, 3)))
ex(5, *, ex(2, +, ex(3, /, ex(4, -, 1))))
ex(ex(5, *, ex(4, -, 1)), *, ex(3, -, 2))
ex(ex(5, *, 3), *, ex(ex(4, -, 1), -, 2))
ex(ex(5, *, ex(4, -, 1)), /, ex(3, -, 2))
ex(ex(5, *, 3), /, ex(ex(4, -, 1), -, 2))
ex(ex(5, *, ex(4, /, 1)), -, ex(2, +, 3))
ex(ex(ex(2, +, 3), *, ex(4, /, 1)), -, 5)
ex(ex(ex(4, /, 1), *, 5), -, ex(2, +, 3))
ex(ex(ex(4, /, 1), *, ex(2, +, 3)), -, 5)
ex(ex(2, *, 3), +, ex(5, +, ex(4, /, 1)))
ex(5, +, ex(ex(4, /, 1), +, ex(2, *, 3)))
ex(ex(4, /, 1), +, ex(5, +, ex(2, *, 3)))
ex(5, *, ex(ex(4, /, 1), +, ex(2, -, 3)))
ex(5, *, ex(ex(4, /, 1), -, ex(3, -, 2)))
ex(ex(3, *, ex(4, /, 1)), -, ex(2, -, 5))
ex(3, -, ex(ex(4, /, 1), *, ex(2, -, 5)))
ex(ex(5, -, 2), +, ex(3, *, ex(4, /, 1)))
ex(3, +, ex(ex(5, -, 2), *, ex(4, /, 1)))
ex(ex(5, -, 2), +, ex(ex(4, /, 1), *, 3))
ex(3, +, ex(ex(4, /, 1), *, ex(5, -, 2)))
ex(5, *, ex(ex(2, +, ex(4, /, 1)), -, 3))
ex(ex(3, *, ex(4, /, 1)), -, ex(2, -, 5))
ex(ex(3, *, ex(4, /, 1)), +, ex(5, -, 2))
ex(ex(5, +, ex(3, *, ex(4, /, 1))), -, 2)
ex(5, -, ex(2, -, ex(3, *, ex(4, /, 1))))
ex(5, +, ex(ex(3, *, ex(4, /, 1)), -, 2))
ex(5, *, ex(2, -, ex(3, -, ex(4, /, 1))))
ex(5, *, ex(2, +, ex(ex(4, /, 1), -, 3)))
ex(ex(5, +, ex(4, /, 1)), +, ex(2, *, 3))
ex(ex(2, *, ex(5, +, ex(4, /, 1))), -, 3)
ex(ex(5, *, ex(4, /, 1)), -, ex(2, +, 3))
ex(ex(ex(5, *, ex(4, /, 1)), -, 3), -, 2)
ex(ex(ex(5, *, ex(4, /, 1)), -, 2), -, 3)
ex(ex(2, +, 3), +, ex(4, +, ex(1, +, 5)))
ex(4, +, ex(ex(1, +, 5), +, ex(2, +, 3)))
ex(ex(1, +, 5), +, ex(4, +, ex(2, +, 3)))
ex(ex(2, +, 4), +, ex(3, +, ex(1, +, 5)))
ex(ex(1, +, 5), +, ex(3, +, ex(2, +, 4)))
ex(3, +, ex(ex(2, +, 4), +, ex(1, +, 5)))
ex(3, +, ex(ex(1, +, 5), +, ex(2, +, 4)))
ex(ex(2, +, 4), +, ex(3, +, ex(1, +, 5)))
ex(ex(1, +, 5), +, ex(3, +, ex(2, +, 4)))
ex(3, -, ex(ex(1, +, 5), *, ex(2, -, 4)))
ex(3, +, ex(ex(1, +, 5), *, ex(4, -, 2)))
ex(3, +, ex(ex(1, +, 5), *, ex(4, /, 2)))
ex(ex(2, +, ex(1, +, 5)), +, ex(3, +, 4))
ex(3, +, ex(4, +, ex(2, +, ex(1, +, 5))))
ex(4, +, ex(3, +, ex(2, +, ex(1, +, 5))))
ex(ex(ex(1, +, 5), /, 2), +, ex(3, *, 4))
ex(3, +, ex(ex(ex(1, +, 5), /, 2), *, 4))
ex(ex(ex(1, +, 5), /, 2), +, ex(4, *, 3))
ex(3, +, ex(4, *, ex(ex(1, +, 5), /, 2)))
ex(ex(3, +, 4), +, ex(2, +, ex(1, +, 5)))
ex(2, +, ex(ex(1, +, 5), +, ex(3, +, 4)))
ex(ex(1, +, 5), +, ex(2, +, ex(3, +, 4)))
ex(ex(3, *, 4), +, ex(ex(1, +, 5), /, 2))
ex(ex(3, +, ex(1, +, 5)), +, ex(2, +, 4))
ex(2, +, ex(4, +, ex(3, +, ex(1, +, 5))))
ex(4, +, ex(2, +, ex(3, +, ex(1, +, 5))))
ex(ex(4, +, ex(1, +, 5)), +, ex(2, +, 3))
ex(2, +, ex(3, +, ex(4, +, ex(1, +, 5))))
ex(ex(3, *, ex(4, +, ex(1, +, 5))), /, 2)
ex(3, +, ex(2, +, ex(4, +, ex(1, +, 5))))
ex(3, *, ex(ex(4, +, ex(1, +, 5)), /, 2))
ex(3, +, ex(ex(4, *, ex(1, +, 5)), /, 2))
ex(ex(4, *, ex(1, *, 5)), -, ex(2, +, 3))
ex(ex(4, *, ex(2, +, 3)), -, ex(1, *, 5))
```

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ex(ex(4, *, ex(1, *, 5)), -, ex(2, +, 3))
ex(ex(4, *, ex(2, +, 3)), -, ex(1, *, 5))
ex(ex(2, *, 3), +, ex(4, +, ex(1, *, 5)))
ex(4, +, ex(ex(1, *, 5), +, ex(2, *, 3)))
ex(ex(1, *, 5), +, ex(4, +, ex(2, *, 3)))
ex(ex(1, *, 5), *, ex(4, +, ex(2, -, 3)))
ex(ex(1, *, 5), *, ex(4, -, ex(3, -, 2)))
ex(ex(1, *, 5), *, ex(ex(2, +, 4), -, 3))
ex(ex(3, *, 4), -, ex(2, -, ex(1, *, 5)))
ex(3, -, ex(4, *, ex(2, -, ex(1, *, 5))))
ex(ex(ex(1, *, 5), -, 2), +, ex(3, *, 4))
ex(3, +, ex(ex(ex(1, *, 5), -, 2), *, 4))
ex(ex(ex(1, *, 5), -, 2), +, ex(4, *, 3))
ex(3, +, ex(4, *, ex(ex(1, *, 5), -, 2)))
ex(ex(3, *, 4), -, ex(2, -, ex(1, *, 5)))
ex(ex(3, *, 4), +, ex(ex(1, *, 5), -, 2))
ex(ex(ex(1, *, 5), +, ex(3, *, 4)), -, 2)
ex(ex(1, *, 5), -, ex(2, -, ex(3, *, 4)))
ex(ex(1, *, 5), +, ex(ex(3, *, 4), -, 2))
ex(ex(1, *, 5), *, ex(2, -, ex(3, -, 4)))
ex(ex(1, *, 5), *, ex(2, +, ex(4, -, 3)))
ex(ex(4, +, ex(1, *, 5)), +, ex(2, *, 3))
ex(ex(2, *, ex(4, +, ex(1, *, 5))), -, 3)
ex(ex(4, *, ex(1, *, 5)), -, ex(2, +, 3))
ex(ex(ex(4, *, ex(1, *, 5)), -, 3), -, 2)
ex(ex(ex(4, *, ex(1, *, 5)), -, 2), -, 3)
ex(ex(2, -, 3), -, ex(4, *, ex(1, -, 5)))
ex(ex(2, *, 4), +, ex(3, -, ex(1, -, 5)))
ex(ex(2, *, 4), -, ex(ex(1, -, 5), -, 3))
ex(3, -, ex(ex(1, -, 5), -, ex(2, *, 4)))
ex(3, +, ex(ex(2, *, 4), -, ex(1, -, 5)))
ex(ex(3, +, ex(2, *, 4)), -, ex(1, -, 5))
ex(ex(3, +, 4), -, ex(2, *, ex(1, -, 5)))
ex(3, +, ex(4, -, ex(2, *, ex(1, -, 5))))
ex(3, -, ex(ex(2, *, ex(1, -, 5)), -, 4))
ex(4, +, ex(3, -, ex(2, *, ex(1, -, 5))))
ex(4, -, ex(ex(2, *, ex(1, -, 5)), -, 3))
ex(ex(3, +, 4), -, ex(2, *, ex(1, -, 5)))
ex(ex(3, -, ex(1, -, 5)), +, ex(2, *, 4))
ex(ex(2, *, 4), -, ex(ex(1, -, 5), -, 3))
ex(ex(2, -, 3), -, ex(4, *, ex(1, -, 5)))
ex(2, -, ex(3, +, ex(4, *, ex(1, -, 5))))
ex(ex(2, -, ex(4, *, ex(1, -, 5))), -, 3)
ex(ex(2, -, 3), +, ex(ex(5, -, 1), *, 4))
ex(ex(2, -, 3), +, ex(4, *, ex(5, -, 1)))
ex(ex(ex(5, -, 1), *, 4), -, ex(3, -, 2))
ex(ex(4, *, ex(5, -, 1)), -, ex(3, -, 2))
ex(ex(2, *, ex(5, -, 1)), +, ex(3, +, 4))
ex(ex(2, *, 4), +, ex(3, +, ex(5, -, 1)))
ex(3, +, ex(ex(5, -, 1), +, ex(2, *, 4)))
ex(3, +, ex(4, +, ex(2, *, ex(5, -, 1))))
ex(ex(5, -, 1), +, ex(3, +, ex(2, *, 4)))
ex(4, +, ex(3, +, ex(2, *, ex(5, -, 1))))
ex(ex(2, *, ex(5, -, 1)), +, ex(3, +, 4))
ex(ex(2, *, 4), +, ex(3, +, ex(5, -, 1)))
ex(3, +, ex(ex(5, -, 1), +, ex(2, *, 4)))
ex(3, +, ex(4, +, ex(2, *, ex(5, -, 1))))
ex(ex(5, -, 1), +, ex(3, +, ex(2, *, 4)))
ex(4, +, ex(3, +, ex(2, *, ex(5, -, 1))))
ex(ex(3, +, ex(5, -, 1)), +, ex(2, *, 4))
ex(ex(3, +, 4), +, ex(2, *, ex(5, -, 1)))
ex(ex(3, +, ex(5, -, 1)), +, ex(2, *, 4))
ex(ex(3, +, 4), +, ex(2, *, ex(5, -, 1)))
ex(ex(ex(5, -, 1), *, 4), +, ex(2, -, 3))
ex(ex(4, *, ex(5, -, 1)), +, ex(2, -, 3))
ex(ex(ex(5, -, 1), *, 4), -, ex(3, -, 2))
ex(ex(4, *, ex(5, -, 1)), -, ex(3, -, 2))
ex(2, -, ex(3, -, ex(ex(5, -, 1), *, 4)))
```

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ex(2, -, ex(3, -, ex(4, *, ex(5, -, 1))))
ex(2, +, ex(ex(ex(5, -, 1), *, 4), -, 3))
ex(2, +, ex(ex(4, *, ex(5, -, 1)), -, 3))
ex(ex(2, +, ex(ex(5, -, 1), *, 4)), -, 3)
ex(ex(2, +, ex(4, *, ex(5, -, 1))), -, 3)
ex(ex(4, *, ex(5, /, 1)), -, ex(2, +, 3))
ex(ex(4, *, ex(2, +, 3)), -, ex(5, /, 1))
ex(ex(4, *, ex(5, /, 1)), -, ex(2, +, 3))
ex(ex(4, *, ex(2, +, 3)), -, ex(5, /, 1))
ex(ex(2, *, 3), +, ex(4, +, ex(5, /, 1)))
ex(4, +, ex(ex(5, /, 1), +, ex(2, *, 3)))
ex(ex(5, /, 1), +, ex(4, +, ex(2, *, 3)))
ex(ex(5, /, 1), *, ex(4, +, ex(2, -, 3)))
ex(ex(5, /, 1), *, ex(4, -, ex(3, -, 2)))
ex(ex(5, /, 1), *, ex(ex(2, +, 4), -, 3))
ex(ex(3, *, 4), -, ex(2, -, ex(5, /, 1)))
ex(3, -, ex(4, *, ex(2, -, ex(5, /, 1))))
ex(ex(ex(5, /, 1), -, 2), +, ex(3, *, 4))
ex(3, +, ex(ex(ex(5, /, 1), -, 2), *, 4))
ex(ex(ex(5, /, 1), -, 2), +, ex(4, *, 3))
ex(3, +, ex(4, *, ex(ex(5, /, 1), -, 2)))
ex(ex(3, *, 4), -, ex(2, -, ex(5, /, 1)))
ex(ex(3, *, 4), +, ex(ex(5, /, 1), -, 2))
ex(ex(ex(5, /, 1), +, ex(3, *, 4)), -, 2)
ex(ex(5, /, 1), -, ex(2, -, ex(3, *, 4)))
ex(ex(5, /, 1), +, ex(ex(3, *, 4), -, 2))
ex(ex(5, /, 1), *, ex(2, -, ex(3, -, 4)))
ex(ex(5, /, 1), *, ex(2, +, ex(4, -, 3)))
ex(ex(4, +, ex(5, /, 1)), +, ex(2, *, 3))
ex(ex(2, *, ex(4, +, ex(5, /, 1))), -, 3)
ex(ex(4, *, ex(5, /, 1)), -, ex(2, +, 3))
ex(ex(ex(4, *, ex(5, /, 1)), -, 3), -, 2)
ex(ex(ex(4, *, ex(5, /, 1)), -, 2), -, 3)
ex(ex(1, +, 4), +, ex(ex(2, +, 3), +, 5))
ex(ex(1, +, 4), +, ex(5, +, ex(2, +, 3)))
ex(ex(2, +, 3), +, ex(ex(1, +, 4), +, 5))
ex(5, +, ex(ex(1, +, 4), +, ex(2, +, 3)))
ex(ex(2, +, 3), +, ex(5, +, ex(1, +, 4)))
ex(5, +, ex(ex(2, +, 3), +, ex(1, +, 4)))
ex(ex(1, +, 4), +, ex(ex(2, +, 3), +, 5))
ex(ex(1, +, 4), +, ex(5, +, ex(2, +, 3)))
ex(ex(2, +, 3), +, ex(ex(1, +, 4), +, 5))
ex(5, +, ex(ex(1, +, 4), +, ex(2, +, 3)))
ex(ex(2, +, 3), +, ex(5, +, ex(1, +, 4)))
ex(5, +, ex(ex(2, +, 3), +, ex(1, +, 4)))
ex(ex(1, +, 4), +, ex(ex(2, +, 3), +, 5))
ex(ex(1, +, 4), +, ex(5, +, ex(2, +, 3)))
ex(ex(2, +, 3), +, ex(ex(1, +, 4), +, 5))
ex(5, +, ex(ex(1, +, 4), +, ex(2, +, 3)))
ex(ex(2, +, 3), +, ex(5, +, ex(1, +, 4)))
ex(5, +, ex(ex(2, +, 3), +, ex(1, +, 4)))
ex(ex(5, *, ex(1, *, 4)), -, ex(2, +, 3))
ex(ex(ex(2, +, 3), *, ex(1, *, 4)), -, 5)
ex(ex(5, *, ex(1, *, 4)), -, ex(2, +, 3))
ex(ex(ex(2, +, 3), *, ex(1, *, 4)), -, 5)
ex(ex(5, *, ex(4, /, 1)), -, ex(2, +, 3))
ex(ex(ex(2, +, 3), *, ex(4, /, 1)), -, 5)
ex(ex(5, *, ex(4, /, 1)), -, ex(2, +, 3))
ex(ex(ex(2, +, 3), *, ex(4, /, 1)), -, 5)
ex(ex(1, +, ex(2, +, 3)), +, ex(4, +, 5))
ex(ex(1, +, 5), +, ex(4, +, ex(2, +, 3)))
ex(4, +, ex(ex(2, +, 3), +, ex(1, +, 5)))
ex(4, +, ex(5, +, ex(1, +, ex(2, +, 3))))
ex(ex(2, +, 3), +, ex(4, +, ex(1, +, 5)))
ex(5, +, ex(4, +, ex(1, +, ex(2, +, 3))))
ex(ex(4, *, ex(2, +, 3)), -, ex(1, *, 5))
ex(ex(4, *, 5), -, ex(1, *, ex(2, +, 3)))
ex(ex(4, *, ex(1, *, 5)), -, ex(2, +, 3))
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ex(ex(4, *, ex(1, *, ex(2, +, 3))), -, 5)
ex(ex(4, *, ex(2, +, 3)), -, ex(1, *, 5))
ex(ex(4, *, 5), -, ex(1, *, ex(2, +, 3)))
ex(ex(4, *, ex(1, *, 5)), -, ex(2, +, 3))
ex(ex(4, *, ex(1, *, ex(2, +, 3))), -, 5)
ex(ex(4, *, ex(2, +, 3)), -, ex(5, /, 1))
ex(ex(4, *, 5), -, ex(ex(2, +, 3), /, 1))
ex(ex(4, *, ex(5, /, 1)), -, ex(2, +, 3))
ex(ex(4, *, ex(ex(2, +, 3), /, 1)), -, 5)
ex(ex(4, *, ex(2, +, 3)), -, ex(5, /, 1))
ex(ex(4, *, 5), -, ex(ex(2, +, 3), /, 1))
ex(ex(4, *, ex(5, /, 1)), -, ex(2, +, 3))
ex(ex(4, *, ex(ex(2, +, 3), /, 1)), -, 5)
ex(ex(1, +, ex(2, +, 3)), +, ex(4, +, 5))
ex(ex(1, +, 5), +, ex(4, +, ex(2, +, 3)))
ex(4, +, ex(ex(2, +, 3), +, ex(1, +, 5)))
ex(4, +, ex(5, +, ex(1, +, ex(2, +, 3))))
ex(ex(2, +, 3), +, ex(4, +, ex(1, +, 5)))
ex(5, +, ex(4, +, ex(1, +, ex(2, +, 3))))
ex(ex(4, *, ex(2, +, 3)), -, ex(1, *, 5))
ex(ex(4, *, 5), -, ex(1, *, ex(2, +, 3)))
ex(ex(4, *, ex(1, *, 5)), -, ex(2, +, 3))
ex(ex(4, *, ex(1, *, ex(2, +, 3))), -, 5)
ex(ex(4, *, ex(2, +, 3)), -, ex(1, *, 5))
ex(ex(4, *, 5), -, ex(1, *, ex(2, +, 3)))
ex(ex(4, *, ex(1, *, 5)), -, ex(2, +, 3))
ex(ex(4, *, ex(1, *, ex(2, +, 3))), -, 5)
ex(ex(4, *, ex(2, +, 3)), -, ex(5, /, 1))
ex(ex(4, *, 5), -, ex(ex(2, +, 3), /, 1))
ex(ex(4, *, ex(5, /, 1)), -, ex(2, +, 3))
ex(ex(4, *, ex(ex(2, +, 3), /, 1)), -, 5)
ex(ex(4, *, ex(2, +, 3)), -, ex(5, /, 1))
ex(ex(4, *, 5), -, ex(ex(2, +, 3), /, 1))
ex(ex(4, *, ex(5, /, 1)), -, ex(2, +, 3))
ex(ex(4, *, ex(ex(2, +, 3), /, 1)), -, 5)
ex(ex(4, +, ex(2, +, 3)), +, ex(1, +, 5))
ex(ex(4, +, 5), +, ex(1, +, ex(2, +, 3)))
ex(1, +, ex(ex(2, +, 3), +, ex(4, +, 5)))
ex(1, +, ex(5, +, ex(4, +, ex(2, +, 3))))
ex(ex(2, +, 3), +, ex(1, +, ex(4, +, 5)))
ex(5, +, ex(1, +, ex(4, +, ex(2, +, 3))))
ex(ex(4, *, ex(2, +, 3)), -, ex(1, *, 5))
ex(ex(4, *, 5), -, ex(1, *, ex(2, +, 3)))
ex(ex(4, *, ex(2, +, 3)), -, ex(5, /, 1))
ex(ex(4, *, 5), -, ex(ex(2, +, 3), /, 1))
ex(1, *, ex(ex(4, *, 5), -, ex(2, +, 3)))
ex(1, *, ex(ex(4, *, ex(2, +, 3)), -, 5))
ex(ex(ex(4, *, 5), -, ex(2, +, 3)), /, 1)
ex(ex(ex(4, *, ex(2, +, 3)), -, 5), /, 1)
ex(ex(1, *, ex(4, *, 5)), -, ex(2, +, 3))
ex(ex(1, *, ex(4, *, ex(2, +, 3))), -, 5)
ex(ex(ex(4, *, 5), /, 1), -, ex(2, +, 3))
ex(ex(ex(4, *, ex(2, +, 3)), /, 1), -, 5)
ex(ex(4, +, ex(2, +, 3)), +, ex(1, +, 5))
ex(ex(4, +, 5), +, ex(1, +, ex(2, +, 3)))
ex(1, +, ex(ex(2, +, 3), +, ex(4, +, 5)))
ex(1, +, ex(5, +, ex(4, +, ex(2, +, 3))))
ex(ex(2, +, 3), +, ex(1, +, ex(4, +, 5)))
ex(5, +, ex(1, +, ex(4, +, ex(2, +, 3))))
ex(ex(4, *, ex(2, +, 3)), -, ex(1, *, 5))
ex(ex(4, *, 5), -, ex(1, *, ex(2, +, 3)))
ex(ex(4, *, ex(2, +, 3)), -, ex(5, /, 1))
ex(ex(4, *, 5), -, ex(ex(2, +, 3), /, 1))
ex(1, *, ex(ex(4, *, 5), -, ex(2, +, 3)))
ex(1, *, ex(ex(4, *, ex(2, +, 3)), -, 5))
ex(ex(ex(4, *, 5), -, ex(2, +, 3)), /, 1)
ex(ex(ex(4, *, ex(2, +, 3)), -, 5), /, 1)
ex(ex(1, *, ex(4, *, 5)), -, ex(2, +, 3))
```

```
ex(ex(1, *, ex(4, *, ex(2, +, 3))), -, 5)
ex(ex(ex(4, *, 5), /, 1), -, ex(2, +, 3))
ex(ex(ex(4, *, ex(2, +, 3)), /, 1), -, 5)
ex(ex(ex(2, +, 3), +, 5), +, ex(1, +, 4))
ex(ex(5, +, ex(2, +, 3)), +, ex(1, +, 4))
ex(1, +, ex(4, +, ex(ex(2, +, 3), +, 5)))
ex(1, +, ex(4, +, ex(5, +, ex(2, +, 3))))
ex(4, +, ex(1, +, ex(ex(2, +, 3), +, 5)))
ex(4, +, ex(1, +, ex(5, +, ex(2, +, 3))))
ex(ex(1, *, 4), +, ex(5, +, ex(2, *, 3)))
ex(5, +, ex(ex(2, *, 3), +, ex(1, *, 4)))
ex(ex(2, *, 3), +, ex(5, +, ex(1, *, 4)))
ex(5, *, ex(ex(2, *, 3), +, ex(1, -, 4)))
ex(5, *, ex(ex(2, *, 3), -, ex(4, -, 1)))
ex(ex(4, /, 1), +, ex(5, +, ex(2, *, 3)))
ex(5, +, ex(ex(2, *, 3), +, ex(4, /, 1)))
ex(ex(2, *, 3), +, ex(5, +, ex(4, /, 1)))
ex(ex(1, *, 5), +, ex(4, +, ex(2, *, 3)))
ex(4, +, ex(ex(2, *, 3), +, ex(1, *, 5)))
ex(ex(2, *, 3), +, ex(4, +, ex(1, *, 5)))
ex(ex(5, /, 1), +, ex(4, +, ex(2, *, 3)))
ex(4, +, ex(ex(2, *, 3), +, ex(5, /, 1)))
ex(ex(2, *, 3), +, ex(4, +, ex(5, /, 1)))
ex(5, *, ex(ex(1, +, ex(2, *, 3)), -, 4))
ex(ex(1, *, ex(2, *, 3)), +, ex(4, +, 5))
ex(4, +, ex(5, +, ex(1, *, ex(2, *, 3))))
ex(5, +, ex(4, +, ex(1, *, ex(2, *, 3))))
ex(ex(1, -, ex(2, *, 3)), +, ex(4, *, 5))
ex(ex(4, *, 5), -, ex(ex(2, *, 3), -, 1))
ex(ex(4, *, ex(ex(2, *, 3), -, 1)), -, 5)
ex(ex(4, *, 5), -, ex(ex(2, *, 3), -, 1))
ex(ex(4, *, ex(ex(2, *, 3), -, 1)), -, 5)
ex(ex(ex(2, *, 3), /, 1), +, ex(4, +, 5))
ex(4, +, ex(5, +, ex(ex(2, *, 3), /, 1)))
ex(5, +, ex(4, +, ex(ex(2, *, 3), /, 1)))
ex(ex(4, +, 5), +, ex(1, *, ex(2, *, 3)))
ex(ex(4, +, 5), +, ex(ex(2, *, 3), /, 1))
ex(1, *, ex(ex(2, *, 3), +, ex(4, +, 5)))
ex(ex(ex(2, *, 3), +, ex(4, +, 5)), /, 1)
ex(ex(2, *, 3), +, ex(1, *, ex(4, +, 5)))
ex(ex(2, *, 3), +, ex(ex(4, +, 5), /, 1))
ex(ex(4, *, 5), +, ex(1, -, ex(2, *, 3)))
ex(ex(4, *, 5), -, ex(ex(2, *, 3), -, 1))
ex(1, -, ex(ex(2, *, 3), -, ex(4, *, 5)))
ex(1, +, ex(ex(4, *, 5), -, ex(2, *, 3)))
ex(ex(1, +, ex(4, *, 5)), -, ex(2, *, 3))
ex(ex(4, +, ex(2, *, 3)), +, ex(1, *, 5))
ex(ex(4, +, ex(2, *, 3)), +, ex(5, /, 1))
ex(1, *, ex(5, +, ex(4, +, ex(2, *, 3))))
ex(ex(5, +, ex(4, +, ex(2, *, 3))), /, 1)
ex(5, +, ex(1, *, ex(4, +, ex(2, *, 3))))
ex(5, +, ex(ex(4, +, ex(2, *, 3)), /, 1))
ex(5, *, ex(1, -, ex(4, -, ex(2, *, 3))))
ex(5, *, ex(1, +, ex(ex(2, *, 3), -, 4)))
ex(ex(5, +, ex(2, *, 3)), +, ex(1, *, 4))
ex(ex(5, +, ex(2, *, 3)), +, ex(4, /, 1))
ex(1, *, ex(4, +, ex(5, +, ex(2, *, 3))))
ex(ex(4, +, ex(5, +, ex(2, *, 3))), /, 1)
ex(4, +, ex(1, *, ex(5, +, ex(2, *, 3))))
ex(4, +, ex(ex(5, +, ex(2, *, 3)), /, 1))
ex(5, *, ex(ex(2, -, 3), +, ex(1, *, 4)))
ex(ex(1, -, 4), *, ex(5, *, ex(2, -, 3)))
ex(5, *, ex(ex(2, -, 3), *, ex(1, -, 4)))
ex(ex(2, -, 3), *, ex(5, *, ex(1, -, 4)))
ex(5, *, ex(ex(2, -, 3), +, ex(4, /, 1)))
ex(ex(1, *, 5), *, ex(4, +, ex(2, -, 3)))
ex(ex(2, -, 3), -, ex(4, *, ex(1, -, 5)))
ex(ex(2, -, 3), +, ex(ex(5, -, 1), *, 4))
```

```
ex(ex(2, -, 3), +, ex(4, *, ex(5, -, 1)))
ex(ex(5, /, 1), *, ex(4, +, ex(2, -, 3)))
ex(5, *, ex(4, +, ex(1, *, ex(2, -, 3))))
ex(5, *, ex(4, +, ex(ex(2, -, 3), /, 1)))
ex(ex(4, +, ex(2, -, 3)), *, ex(1, *, 5))
ex(ex(4, +, ex(2, -, 3)), *, ex(5, /, 1))
ex(1, *, ex(5, *, ex(4, +, ex(2, -, 3))))
ex(ex(5, *, ex(4, +, ex(2, -, 3))), /, 1)
ex(5, *, ex(1, *, ex(4, +, ex(2, -, 3))))
ex(5, *, ex(ex(4, +, ex(2, -, 3)), /, 1))
ex(ex(ex(5, +, ex(2, -, 3)), *, 4), -, 1)
ex(ex(4, *, ex(5, +, ex(2, -, 3))), -, 1)
ex(ex(5, *, ex(2, -, 3)), *, ex(1, -, 4))
ex(5, *, ex(ex(1, *, 4), -, ex(3, -, 2)))
ex(5, *, ex(ex(ex(3, -, 2), *, 4), -, 1))
ex(ex(4, -, ex(3, -, 2)), *, ex(5, *, 1))
ex(ex(4, -, 1), *, ex(5, *, ex(3, -, 2)))
ex(ex(4, -, ex(3, -, 2)), *, ex(5, /, 1))
ex(ex(4, -, 1), *, ex(5, /, ex(3, -, 2)))
ex(5, *, ex(ex(3, -, 2), *, ex(4, -, 1)))
ex(5, *, ex(1, *, ex(4, -, ex(3, -, 2))))
ex(5, *, ex(ex(4, -, 1), /, ex(3, -, 2)))
ex(5, *, ex(ex(4, -, ex(3, -, 2)), /, 1))
ex(ex(3, -, 2), *, ex(5, *, ex(4, -, 1)))
ex(1, *, ex(5, *, ex(4, -, ex(3, -, 2))))
ex(ex(5, *, ex(4, -, 1)), /, ex(3, -, 2))
ex(ex(5, *, ex(4, -, ex(3, -, 2))), /, 1)
ex(5, *, ex(ex(4, /, 1), -, ex(3, -, 2)))
ex(5, *, ex(ex(4, /, ex(3, -, 2)), -, 1))
ex(ex(ex(3, -, 2), *, 5), *, ex(4, -, 1))
ex(ex(1, *, 5), *, ex(4, -, ex(3, -, 2)))
ex(ex(ex(5, -, 1), *, 4), -, ex(3, -, 2))
ex(ex(ex(5, -, ex(3, -, 2)), *, 4), -, 1)
ex(ex(4, *, ex(5, -, 1)), -, ex(3, -, 2))
ex(ex(4, *, ex(5, -, ex(3, -, 2))), -, 1)
ex(ex(5, /, ex(3, -, 2)), *, ex(4, -, 1))
ex(ex(5, /, 1), *, ex(4, -, ex(3, -, 2)))
ex(5, *, ex(4, -, ex(ex(3, -, 2), *, 1)))
ex(5, *, ex(4, -, ex(1, *, ex(3, -, 2))))
ex(5, *, ex(4, -, ex(ex(3, -, 2), /, 1)))
ex(5, *, ex(4, -, ex(1, /, ex(3, -, 2))))
ex(5, *, ex(4, -, ex(ex(3, -, 2), /, 1)))
ex(5, *, ex(4, -, ex(1, /, ex(3, -, 2))))
ex(5, *, ex(ex(4, *, 1), -, ex(3, -, 2)))
ex(5, *, ex(ex(4, *, ex(3, -, 2)), -, 1))
ex(ex(4, -, ex(3, -, 2)), *, ex(1, *, 5))
ex(ex(4, -, 1), *, ex(ex(3, -, 2), *, 5))
ex(ex(4, -, ex(3, -, 2)), *, ex(5, /, 1))
ex(ex(4, -, 1), *, ex(5, /, ex(3, -, 2)))
ex(ex(3, -, 2), *, ex(5, *, ex(4, -, 1)))
ex(1, *, ex(5, *, ex(4, -, ex(3, -, 2))))
ex(ex(5, *, ex(4, -, 1)), /, ex(3, -, 2))
ex(ex(5, *, ex(4, -, ex(3, -, 2))), /, 1)
ex(5, *, ex(ex(3, -, 2), *, ex(4, -, 1)))
ex(5, *, ex(1, *, ex(4, -, ex(3, -, 2))))
ex(5, *, ex(ex(4, -, 1), /, ex(3, -, 2)))
ex(5, *, ex(ex(4, -, ex(3, -, 2)), /, 1))
ex(5, *, ex(ex(4, /, 1), -, ex(3, -, 2)))
ex(5, *, ex(ex(4, /, ex(3, -, 2)), -, 1))
ex(ex(5, *, ex(3, -, 2)), *, ex(4, -, 1))
ex(ex(5, *, 1), *, ex(4, -, ex(3, -, 2)))
ex(ex(ex(5, -, 1), *, 4), -, ex(3, -, 2))
ex(ex(ex(5, -, ex(3, -, 2)), *, 4), -, 1)
ex(ex(4, *, ex(5, -, 1)), -, ex(3, -, 2))
ex(ex(4, *, ex(5, -, ex(3, -, 2))), -, 1)
ex(ex(5, /, ex(3, -, 2)), *, ex(4, -, 1))
ex(ex(5, /, 1), *, ex(4, -, ex(3, -, 2)))
ex(ex(1, +, 3), +, ex(5, +, ex(2, +, 4)))
```

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ex(5, +, ex(ex(2, +, 4), +, ex(1, +, 3)))
ex(ex(2, +, 4), +, ex(5, +, ex(1, +, 3)))
ex(5, *, ex(ex(2, +, 4), -, ex(1, *, 3)))
ex(ex(5, *, ex(2, +, 4)), /, ex(3, -, 1))
ex(5, *, ex(ex(2, +, 4), /, ex(3, -, 1)))
ex(5, *, ex(ex(2, +, 4), -, ex(3, /, 1)))
ex(ex(1, +, 5), +, ex(3, +, ex(2, +, 4)))
ex(ex(2, +, 4), +, ex(3, +, ex(1, +, 5)))
ex(3, +, ex(ex(1, +, 5), +, ex(2, +, 4)))
ex(3, +, ex(ex(2, +, 4), +, ex(1, +, 5)))
ex(ex(1, +, 5), +, ex(3, +, ex(2, +, 4)))
ex(ex(2, +, 4), +, ex(3, +, ex(1, +, 5)))
ex(ex(1, *, 5), *, ex(ex(2, +, 4), -, 3))
ex(ex(5, /, 1), *, ex(ex(2, +, 4), -, 3))
ex(ex(1, +, ex(2, +, 4)), +, ex(3, +, 5))
ex(3, +, ex(5, +, ex(1, +, ex(2, +, 4))))
ex(5, +, ex(3, +, ex(1, +, ex(2, +, 4))))
ex(5, *, ex(ex(1, *, ex(2, +, 4)), -, 3))
ex(5, *, ex(ex(ex(2, +, 4), /, 1), -, 3))
ex(ex(3, +, 5), +, ex(1, +, ex(2, +, 4)))
ex(1, +, ex(ex(2, +, 4), +, ex(3, +, 5)))
ex(ex(2, +, 4), +, ex(1, +, ex(3, +, 5)))
ex(ex(3, +, ex(2, +, 4)), +, ex(1, +, 5))
ex(1, +, ex(5, +, ex(3, +, ex(2, +, 4))))
ex(5, +, ex(1, +, ex(3, +, ex(2, +, 4))))
ex(ex(ex(2, +, 4), -, 3), *, ex(1, *, 5))
ex(ex(ex(2, +, 4), -, 3), *, ex(5, /, 1))
ex(1, *, ex(5, *, ex(ex(2, +, 4), -, 3)))
ex(ex(5, *, ex(ex(2, +, 4), -, 3)), /, 1)
ex(5, *, ex(1, *, ex(ex(2, +, 4), -, 3)))
ex(5, *, ex(ex(ex(2, +, 4), -, 3), /, 1))
ex(5, *, ex(1, +, ex(ex(2, +, 4), /, 3)))
ex(ex(5, +, ex(2, +, 4)), +, ex(1, +, 3))
ex(1, +, ex(3, +, ex(5, +, ex(2, +, 4))))
ex(3, +, ex(1, +, ex(5, +, ex(2, +, 4))))
ex(ex(5, *, ex(2, +, 4)), /, ex(3, -, 1))
ex(ex(5, +, ex(2, *, 4)), -, ex(1, -, 3))
ex(5, +, ex(ex(2, *, 4), -, ex(1, -, 3)))
ex(5, -, ex(ex(1, -, 3), -, ex(2, *, 4)))
ex(ex(2, *, 4), +, ex(5, -, ex(1, -, 3)))
ex(ex(2, *, 4), -, ex(ex(1, -, 3), -, 5))
ex(ex(3, -, 1), +, ex(5, +, ex(2, *, 4)))
ex(5, +, ex(ex(2, *, 4), +, ex(3, -, 1)))
ex(ex(2, *, 4), +, ex(5, +, ex(3, -, 1)))
ex(ex(3, +, ex(2, *, 4)), -, ex(1, -, 5))
ex(3, +, ex(ex(2, *, 4), -, ex(1, -, 5)))
ex(3, -, ex(ex(1, -, 5), -, ex(2, *, 4)))
ex(ex(2, *, 4), +, ex(3, -, ex(1, -, 5)))
ex(ex(2, *, 4), -, ex(ex(1, -, 5), -, 3))
ex(ex(5, -, 1), +, ex(3, +, ex(2, *, 4)))
ex(3, +, ex(ex(2, *, 4), +, ex(5, -, 1)))
ex(ex(2, *, 4), +, ex(3, +, ex(5, -, 1)))
ex(ex(5, *, ex(1, +, ex(2, *, 4))), /, 3)
ex(5, *, ex(ex(1, +, ex(2, *, 4)), /, 3))
ex(ex(3, +, 5), -, ex(1, -, ex(2, *, 4)))
ex(3, +, ex(5, -, ex(1, -, ex(2, *, 4))))
ex(3, -, ex(ex(1, -, ex(2, *, 4)), -, 5))
ex(5, +, ex(3, -, ex(1, -, ex(2, *, 4))))
ex(5, -, ex(ex(1, -, ex(2, *, 4)), -, 3))
ex(ex(ex(2, *, 4), -, 1), +, ex(3, +, 5))
ex(3, +, ex(5, +, ex(ex(2, *, 4), -, 1)))
ex(5, +, ex(3, +, ex(ex(2, *, 4), -, 1)))
ex(ex(3, +, 5), -, ex(1, -, ex(2, *, 4)))
ex(ex(2, *, 4), -, ex(1, -, ex(3, +, 5)))
ex(ex(3, +, 5), +, ex(ex(2, *, 4), -, 1))
ex(ex(2, *, 4), +, ex(ex(3, +, 5), -, 1))
ex(ex(ex(3, +, 5), +, ex(2, *, 4)), -, 1)
ex(ex(ex(2, *, 4), +, ex(3, +, 5)), -, 1)
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ex(ex(3, +, 5), -, ex(1, -, ex(2, *, 4)))
ex(ex(2, *, 4), -, ex(1, -, ex(3, +, 5)))
ex(ex(3, +, 5), +, ex(ex(2, *, 4), -, 1))
ex(ex(2, *, 4), +, ex(ex(3, +, 5), -, 1))
ex(ex(ex(2, *, 4), *, ex(5, -, 3)), -, 1)
ex(ex(3, +, ex(2, *, 4)), -, ex(1, -, 5))
ex(ex(3, +, ex(2, *, 4)), +, ex(5, -, 1))
ex(ex(5, +, ex(3, +, ex(2, *, 4))), -, 1)
ex(5, -, ex(1, -, ex(3, +, ex(2, *, 4))))
ex(5, +, ex(ex(3, +, ex(2, *, 4)), -, 1))
ex(ex(5, +, ex(2, *, 4)), -, ex(1, -, 3))
ex(ex(5, +, ex(2, *, 4)), +, ex(3, -, 1))
ex(ex(3, +, ex(5, +, ex(2, *, 4))), -, 1)
ex(3, -, ex(1, -, ex(5, +, ex(2, *, 4))))
ex(3, +, ex(ex(5, +, ex(2, *, 4)), -, 1))
ex(3, -, ex(ex(2, -, 4), *, ex(1, +, 5)))
ex(3, +, ex(ex(4, -, 2), *, ex(1, +, 5)))
ex(ex(ex(4, -, 2), -, 1), *, ex(3, *, 5))
ex(ex(3, *, 5), /, ex(ex(4, -, 2), -, 1))
ex(3, *, ex(5, *, ex(ex(4, -, 2), -, 1)))
ex(3, *, ex(5, /, ex(ex(4, -, 2), -, 1)))
ex(5, *, ex(3, *, ex(ex(4, -, 2), -, 1)))
ex(5, *, ex(3, /, ex(ex(4, -, 2), -, 1)))
ex(ex(ex(4, -, 2), *, ex(3, +, 5)), -, 1)
ex(ex(3, *, 5), *, ex(ex(4, -, 2), -, 1))
ex(ex(3, *, 5), /, ex(ex(4, -, 2), -, 1))
ex(3, +, ex(ex(4, /, 2), *, ex(1, +, 5)))
ex(ex(ex(4, /, 2), -, 1), *, ex(3, *, 5))
ex(ex(3, *, 5), /, ex(ex(4, /, 2), -, 1))
ex(3, *, ex(5, *, ex(ex(4, /, 2), -, 1)))
ex(3, *, ex(5, /, ex(ex(4, /, 2), -, 1)))
ex(5, *, ex(3, *, ex(ex(4, /, 2), -, 1)))
ex(5, *, ex(3, /, ex(ex(4, /, 2), -, 1)))
ex(ex(ex(4, /, 2), *, ex(3, +, 5)), -, 1)
ex(ex(3, *, 5), *, ex(ex(4, /, 2), -, 1))
ex(ex(3, *, 5), /, ex(ex(4, /, 2), -, 1))
ex(ex(1, +, 3), +, ex(4, +, ex(2, +, 5)))
ex(4, +, ex(ex(1, +, 3), +, ex(2, +, 5)))
ex(ex(1, +, 3), +, ex(ex(2, +, 5), +, 4))
ex(4, +, ex(ex(2, +, 5), +, ex(1, +, 3)))
ex(ex(2, +, 5), +, ex(ex(1, +, 3), +, 4))
ex(ex(2, +, 5), +, ex(4, +, ex(1, +, 3)))
ex(ex(2, +, 5), -, ex(4, *, ex(1, -, 3)))
ex(ex(2, +, 5), +, ex(4, *, ex(3, -, 1)))
ex(ex(1, +, 4), +, ex(3, +, ex(2, +, 5)))
ex(3, +, ex(ex(2, +, 5), +, ex(1, +, 4)))
ex(ex(2, +, 5), +, ex(3, +, ex(1, +, 4)))
ex(ex(1, +, ex(2, +, 5)), +, ex(3, +, 4))
ex(3, +, ex(4, +, ex(1, +, ex(2, +, 5))))
ex(4, +, ex(3, +, ex(1, +, ex(2, +, 5))))
ex(ex(3, +, 4), +, ex(1, +, ex(2, +, 5)))
ex(ex(2, +, 5), +, ex(1, +, ex(3, +, 4)))
ex(1, +, ex(ex(3, +, 4), +, ex(2, +, 5)))
ex(1, +, ex(ex(2, +, 5), +, ex(3, +, 4)))
ex(ex(3, +, 4), +, ex(1, +, ex(2, +, 5)))
ex(ex(2, +, 5), +, ex(1, +, ex(3, +, 4)))
ex(ex(3, +, ex(2, +, 5)), +, ex(1, +, 4))
ex(1, +, ex(4, +, ex(3, +, ex(2, +, 5))))
ex(4, +, ex(1, +, ex(3, +, ex(2, +, 5))))
ex(ex(ex(ex(2, +, 5), -, 3), *, 4), -, 1)
ex(ex(4, *, ex(ex(2, +, 5), -, 3)), -, 1)
ex(ex(4, +, ex(2, +, 5)), +, ex(1, +, 3))
ex(1, +, ex(3, +, ex(4, +, ex(2, +, 5))))
ex(3, +, ex(1, +, ex(4, +, ex(2, +, 5))))
ex(3, *, ex(ex(2, *, 5), -, ex(1, +, 4)))
ex(3, *, ex(ex(ex(2, *, 5), -, 1), -, 4))
ex(3, *, ex(ex(ex(2, *, 5), -, 4), -, 1))
ex(ex(1, *, 3), -, ex(4, *, ex(2, -, 5)))
```

```
ex(ex(4, *, ex(1, *, 3)), -, ex(2, -, 5))
ex(ex(3, /, 1), -, ex(4, *, ex(2, -, 5)))
ex(ex(4, *, ex(3, /, 1)), -, ex(2, -, 5))
ex(3, -, ex(ex(2, -, 5), *, ex(1, *, 4)))
ex(ex(3, *, ex(1, *, 4)), -, ex(2, -, 5))
ex(3, -, ex(ex(2, -, 5), *, ex(4, /, 1)))
ex(ex(3, *, ex(4, /, 1)), -, ex(2, -, 5))
ex(ex(3, *, 4), -, ex(1, *, ex(2, -, 5)))
ex(3, -, ex(4, *, ex(1, *, ex(2, -, 5))))
ex(ex(3, *, 4), -, ex(ex(2, -, 5), /, 1))
ex(3, -, ex(4, *, ex(ex(2, -, 5), /, 1)))
ex(ex(3, *, 4), -, ex(1, *, ex(2, -, 5)))
ex(ex(3, *, 4), -, ex(ex(2, -, 5), /, 1))
ex(1, *, ex(ex(3, *, 4), -, ex(2, -, 5)))
ex(ex(ex(3, *, 4), -, ex(2, -, 5)), /, 1)
ex(ex(1, *, ex(3, *, 4)), -, ex(2, -, 5))
ex(ex(ex(3, *, 4), /, 1), -, ex(2, -, 5))
ex(ex(1, *, 3), -, ex(4, *, ex(2, -, 5)))
ex(ex(3, /, 1), -, ex(4, *, ex(2, -, 5)))
ex(1, *, ex(3, -, ex(4, *, ex(2, -, 5))))
ex(ex(3, -, ex(4, *, ex(2, -, 5))), /, 1)
ex(3, -, ex(1, *, ex(4, *, ex(2, -, 5))))
ex(3, -, ex(ex(4, *, ex(2, -, 5)), /, 1))
ex(ex(1, *, ex(5, -, 2)), +, ex(4, *, 3))
ex(ex(1, *, 3), +, ex(4, *, ex(5, -, 2)))
ex(ex(5, -, 2), +, ex(4, *, ex(1, *, 3)))
ex(3, +, ex(4, *, ex(1, *, ex(5, -, 2))))
ex(ex(1, *, ex(5, -, 2)), +, ex(4, *, 3))
ex(ex(1, *, 3), +, ex(4, *, ex(5, -, 2)))
ex(ex(5, -, 2), +, ex(4, *, ex(1, *, 3)))
ex(3, +, ex(4, *, ex(1, *, ex(5, -, 2))))
ex(ex(ex(5, -, 2), /, 1), +, ex(4, *, 3))
ex(ex(3, /, 1), +, ex(4, *, ex(5, -, 2)))
ex(ex(5, -, 2), +, ex(4, *, ex(3, /, 1)))
ex(3, +, ex(4, *, ex(ex(5, -, 2), /, 1)))
ex(ex(ex(5, -, 2), /, 1), +, ex(4, *, 3))
ex(ex(3, /, 1), +, ex(4, *, ex(5, -, 2)))
ex(ex(5, -, 2), +, ex(4, *, ex(3, /, 1)))
ex(3, +, ex(4, *, ex(ex(5, -, 2), /, 1)))
ex(ex(5, -, 2), +, ex(3, *, ex(1, *, 4)))
ex(3, +, ex(ex(5, -, 2), *, ex(1, *, 4)))
ex(ex(5, -, 2), +, ex(3, *, ex(1, *, 4)))
ex(3, +, ex(ex(5, -, 2), *, ex(1, *, 4)))
ex(ex(5, -, 2), +, ex(3, *, ex(4, /, 1)))
ex(3, +, ex(ex(5, -, 2), *, ex(4, /, 1)))
ex(ex(5, -, 2), +, ex(3, *, ex(4, /, 1)))
ex(3, +, ex(ex(5, -, 2), *, ex(4, /, 1)))
ex(ex(1, *, ex(5, -, 2)), +, ex(3, *, 4))
ex(ex(1, *, 3), +, ex(ex(5, -, 2), *, 4))
ex(ex(5, -, 2), +, ex(ex(1, *, 3), *, 4))
ex(3, +, ex(ex(1, *, ex(5, -, 2)), *, 4))
ex(ex(1, *, ex(5, -, 2)), +, ex(4, *, 3))
ex(ex(1, *, 3), +, ex(4, *, ex(5, -, 2)))
ex(ex(5, -, 2), +, ex(4, *, ex(1, *, 3)))
ex(3, +, ex(4, *, ex(1, *, ex(5, -, 2))))
ex(ex(ex(5, -, 2), /, 1), +, ex(3, *, 4))
ex(ex(3, /, 1), +, ex(ex(5, -, 2), *, 4))
ex(ex(5, -, 2), +, ex(ex(3, /, 1), *, 4))
ex(3, +, ex(ex(ex(5, -, 2), /, 1), *, 4))
ex(ex(ex(5, -, 2), /, 1), +, ex(4, *, 3))
ex(ex(3, /, 1), +, ex(4, *, ex(5, -, 2)))
ex(ex(5, -, 2), +, ex(4, *, ex(3, /, 1)))
ex(3, +, ex(4, *, ex(ex(5, -, 2), /, 1)))
ex(ex(ex(5, -, 2), *, 4), +, ex(1, *, 3))
ex(ex(3, *, 4), +, ex(1, *, ex(5, -, 2)))
ex(ex(ex(5, -, 2), *, 4), +, ex(3, /, 1))
ex(ex(3, *, 4), +, ex(ex(5, -, 2), /, 1))
ex(1, *, ex(ex(5, -, 2), +, ex(3, *, 4)))
```

```
ex(1, *, ex(3, +, ex(ex(5, -, 2), *, 4)))
ex(ex(ex(5, -, 2), +, ex(3, *, 4)), /, 1)
ex(ex(3, +, ex(ex(5, -, 2), *, 4)), /, 1)
ex(ex(5, -, 2), +, ex(1, *, ex(3, *, 4)))
ex(3, +, ex(1, *, ex(ex(5, -, 2), *, 4)))
ex(ex(5, -, 2), +, ex(ex(3, *, 4), /, 1))
ex(3, +, ex(ex(ex(5, -, 2), *, 4), /, 1))
ex(ex(4, *, ex(5, -, 2)), +, ex(1, *, 3))
ex(ex(4, *, 3), +, ex(1, *, ex(5, -, 2)))
ex(ex(4, *, ex(5, -, 2)), +, ex(3, /, 1))
ex(ex(4, *, 3), +, ex(ex(5, -, 2), /, 1))
ex(1, *, ex(ex(5, -, 2), +, ex(4, *, 3)))
ex(1, *, ex(3, +, ex(4, *, ex(5, -, 2))))
ex(ex(ex(5, -, 2), +, ex(4, *, 3)), /, 1)
ex(ex(3, +, ex(4, *, ex(5, -, 2))), /, 1)
ex(ex(5, -, 2), +, ex(1, *, ex(4, *, 3)))
ex(3, +, ex(1, *, ex(4, *, ex(5, -, 2))))
ex(ex(5, -, 2), +, ex(ex(4, *, 3), /, 1))
ex(3, +, ex(ex(4, *, ex(5, -, 2)), /, 1))
ex(ex(1, +, 2), +, ex(5, +, ex(3, +, 4)))
ex(5, +, ex(ex(3, +, 4), +, ex(1, +, 2)))
ex(ex(3, +, 4), +, ex(5, +, ex(1, +, 2)))
ex(ex(1, +, 5), +, ex(2, +, ex(3, +, 4)))
ex(2, +, ex(ex(3, +, 4), +, ex(1, +, 5)))
ex(ex(3, +, 4), +, ex(2, +, ex(1, +, 5)))
ex(ex(3, +, 4), -, ex(2, *, ex(1, -, 5)))
ex(ex(3, +, 4), +, ex(2, *, ex(5, -, 1)))
ex(ex(1, +, ex(3, +, 4)), +, ex(2, +, 5))
ex(2, +, ex(5, +, ex(1, +, ex(3, +, 4))))
ex(5, +, ex(2, +, ex(1, +, ex(3, +, 4))))
ex(ex(5, *, ex(ex(3, +, 4), -, 1)), /, 2)
ex(5, *, ex(ex(ex(3, +, 4), -, 1), /, 2))
ex(ex(2, +, 5), +, ex(1, +, ex(3, +, 4)))
ex(ex(3, +, 4), +, ex(1, +, ex(2, +, 5)))
ex(1, +, ex(ex(2, +, 5), +, ex(3, +, 4)))
ex(1, +, ex(ex(3, +, 4), +, ex(2, +, 5)))
ex(ex(2, +, 5), +, ex(1, +, ex(3, +, 4)))
ex(ex(3, +, 4), +, ex(1, +, ex(2, +, 5)))
ex(ex(2, +, ex(3, +, 4)), +, ex(1, +, 5))
ex(1, +, ex(5, +, ex(2, +, ex(3, +, 4))))
ex(5, +, ex(1, +, ex(2, +, ex(3, +, 4))))
ex(ex(5, +, ex(3, +, 4)), +, ex(1, +, 2))
ex(1, +, ex(2, +, ex(5, +, ex(3, +, 4))))
ex(2, +, ex(1, +, ex(5, +, ex(3, +, 4))))
ex(ex(5, +, ex(3, *, 4)), -, ex(1, *, 2))
ex(5, +, ex(ex(3, *, 4), -, ex(1, *, 2)))
ex(5, -, ex(ex(1, *, 2), -, ex(3, *, 4)))
ex(ex(3, *, 4), +, ex(5, -, ex(1, *, 2)))
ex(ex(3, *, 4), -, ex(ex(1, *, 2), -, 5))
ex(ex(5, +, ex(3, *, 4)), -, ex(2, /, 1))
ex(5, +, ex(ex(3, *, 4), -, ex(2, /, 1)))
ex(5, -, ex(ex(2, /, 1), -, ex(3, *, 4)))
ex(ex(3, *, 4), +, ex(5, -, ex(2, /, 1)))
ex(ex(3, *, 4), -, ex(ex(2, /, 1), -, 5))
ex(ex(3, *, 4), +, ex(ex(1, +, 5), /, 2))
ex(ex(1, *, 5), -, ex(2, -, ex(3, *, 4)))
ex(ex(1, *, 5), +, ex(ex(3, *, 4), -, 2))
ex(ex(ex(3, *, 4), +, ex(1, *, 5)), -, 2)
ex(ex(3, *, 4), -, ex(2, -, ex(1, *, 5)))
ex(ex(3, *, 4), +, ex(ex(1, *, 5), -, 2))
ex(ex(5, /, 1), -, ex(2, -, ex(3, *, 4)))
ex(ex(5, /, 1), +, ex(ex(3, *, 4), -, 2))
ex(ex(ex(3, *, 4), +, ex(5, /, 1)), -, 2)
ex(ex(3, *, 4), -, ex(2, -, ex(5, /, 1)))
ex(ex(3, *, 4), +, ex(ex(5, /, 1), -, 2))
ex(ex(1, *, ex(3, *, 4)), -, ex(2, -, 5))
ex(ex(1, *, ex(3, *, 4)), +, ex(5, -, 2))
ex(ex(5, +, ex(1, *, ex(3, *, 4))), -, 2)
```

```
ex(5, -, ex(2, -, ex(1, *, ex(3, *, 4))))
ex(5, +, ex(ex(1, *, ex(3, *, 4)), -, 2))
ex(ex(ex(3, *, 4), /, 1), -, ex(2, -, 5))
ex(ex(ex(3, *, 4), /, 1), +, ex(5, -, 2))
ex(ex(5, +, ex(ex(3, *, 4), /, 1)), -, 2)
ex(5, -, ex(2, -, ex(ex(3, *, 4), /, 1)))
ex(5, +, ex(ex(ex(3, *, 4), /, 1), -, 2))
ex(ex(1, *, ex(3, *, 4)), -, ex(2, -, 5))
ex(ex(ex(3, *, 4), /, 1), -, ex(2, -, 5))
ex(1, *, ex(ex(3, *, 4), -, ex(2, -, 5)))
ex(ex(ex(3, *, 4), -, ex(2, -, 5)), /, 1)
ex(ex(3, *, 4), -, ex(1, *, ex(2, -, 5)))
ex(ex(3, *, 4), -, ex(ex(2, -, 5), /, 1))
ex(ex(5, -, 2), +, ex(1, *, ex(3, *, 4)))
ex(ex(5, -, 2), +, ex(ex(3, *, 4), /, 1))
ex(1, *, ex(ex(3, *, 4), +, ex(5, -, 2)))
ex(ex(ex(3, *, 4), +, ex(5, -, 2)), /, 1)
ex(ex(3, *, 4), +, ex(1, *, ex(5, -, 2)))
ex(ex(3, *, 4), +, ex(ex(5, -, 2), /, 1))
ex(ex(1, *, 5), -, ex(2, -, ex(3, *, 4)))
ex(ex(5, /, 1), -, ex(2, -, ex(3, *, 4)))
ex(1, *, ex(5, -, ex(2, -, ex(3, *, 4))))
ex(ex(5, -, ex(2, -, ex(3, *, 4))), /, 1)
ex(5, -, ex(1, *, ex(2, -, ex(3, *, 4))))
ex(5, -, ex(ex(2, -, ex(3, *, 4)), /, 1))
ex(ex(ex(3, *, 4), -, 2), +, ex(1, *, 5))
ex(ex(ex(3, *, 4), -, 2), +, ex(5, /, 1))
ex(1, *, ex(5, +, ex(ex(3, *, 4), -, 2)))
ex(ex(5, +, ex(ex(3, *, 4), -, 2)), /, 1)
ex(5, +, ex(1, *, ex(ex(3, *, 4), -, 2)))
ex(5, +, ex(ex(ex(3, *, 4), -, 2), /, 1))
ex(ex(5, +, ex(3, *, 4)), -, ex(1, *, 2))
ex(ex(5, +, ex(3, *, 4)), -, ex(2, /, 1))
ex(1, *, ex(ex(5, +, ex(3, *, 4)), -, 2))
ex(ex(ex(5, +, ex(3, *, 4)), -, 2), /, 1)
ex(ex(1, *, ex(5, +, ex(3, *, 4))), -, 2)
ex(ex(ex(5, +, ex(3, *, 4)), /, 1), -, 2)
ex(1, -, ex(2, *, ex(5, -, ex(3, *, 4))))
ex(1, +, ex(2, *, ex(ex(3, *, 4), -, 5)))
ex(5, *, ex(ex(1, *, 2), -, ex(3, -, 4)))
ex(5, *, ex(ex(2, /, 1), -, ex(3, -, 4)))
ex(ex(1, *, 5), *, ex(2, -, ex(3, -, 4)))
ex(ex(5, /, 1), *, ex(2, -, ex(3, -, 4)))
ex(5, *, ex(2, -, ex(1, *, ex(3, -, 4))))
ex(5, *, ex(2, -, ex(ex(3, -, 4), /, 1)))
ex(5, *, ex(1, -, ex(2, *, ex(3, -, 4))))
ex(ex(2, -, ex(3, -, 4)), *, ex(1, *, 5))
ex(ex(2, -, ex(3, -, 4)), *, ex(5, /, 1))
ex(1, *, ex(5, *, ex(2, -, ex(3, -, 4))))
ex(ex(5, *, ex(2, -, ex(3, -, 4))), /, 1)
ex(5, *, ex(1, *, ex(2, -, ex(3, -, 4))))
ex(5, *, ex(ex(2, -, ex(3, -, 4)), /, 1))
ex(ex(ex(4, -, 3), +, 2), *, ex(5, *, 1))
ex(ex(1, +, 2), *, ex(5, *, ex(4, -, 3)))
ex(ex(ex(4, -, 3), +, 2), *, ex(5, /, 1))
ex(ex(1, +, 2), *, ex(5, /, ex(4, -, 3)))
ex(5, *, ex(ex(4, -, 3), *, ex(1, +, 2)))
ex(5, *, ex(1, *, ex(ex(4, -, 3), +, 2)))
ex(5, *, ex(ex(1, +, 2), /, ex(4, -, 3)))
ex(5, *, ex(ex(ex(4, -, 3), +, 2), /, 1))
ex(ex(4, -, 3), *, ex(5, *, ex(1, +, 2)))
ex(1, *, ex(5, *, ex(ex(4, -, 3), +, 2)))
ex(ex(5, *, ex(1, +, 2)), /, ex(4, -, 3))
ex(ex(5, *, ex(ex(4, -, 3), +, 2)), /, 1)
ex(5, *, ex(ex(4, -, 3), +, ex(1, *, 2)))
ex(5, *, ex(1, +, ex(ex(4, -, 3), *, 2)))
ex(5, *, ex(ex(4, -, 3), +, ex(2, /, 1)))
ex(5, *, ex(1, +, ex(2, /, ex(4, -, 3))))
```

```
ex(ex(ex(4, -, 3), *, 5), *, ex(2, +, 1))
ex(ex(1, *, 5), *, ex(2, +, ex(4, -, 3)))
ex(ex(5, /, ex(4, -, 3)), *, ex(2, +, 1))
ex(ex(5, /, 1), *, ex(2, +, ex(4, -, 3)))
ex(5, *, ex(2, +, ex(ex(4, -, 3), *, 1)))
ex(5, *, ex(2, +, ex(1, *, ex(4, -, 3))))
ex(5, *, ex(2, +, ex(ex(4, -, 3), /, 1)))
ex(5, *, ex(2, +, ex(1, /, ex(4, -, 3))))
ex(5, *, ex(2, +, ex(ex(4, -, 3), /, 1)))
ex(5, *, ex(2, +, ex(1, /, ex(4, -, 3))))
ex(ex(2, +, ex(4, -, 3)), *, ex(1, *, 5))
ex(ex(2, +, 1), *, ex(ex(4, -, 3), *, 5))
ex(ex(2, +, ex(4, -, 3)), *, ex(5, /, 1))
ex(ex(2, +, 1), *, ex(5, /, ex(4, -, 3)))
ex(ex(4, -, 3), *, ex(5, *, ex(2, +, 1)))
ex(1, *, ex(5, *, ex(2, +, ex(4, -, 3))))
ex(ex(5, *, ex(2, +, 1)), /, ex(4, -, 3))
ex(ex(5, *, ex(2, +, ex(4, -, 3))), /, 1)
ex(5, *, ex(ex(4, -, 3), *, ex(2, +, 1)))
ex(5, *, ex(1, *, ex(2, +, ex(4, -, 3))))
ex(5, *, ex(ex(2, +, 1), /, ex(4, -, 3)))
ex(5, *, ex(ex(2, +, ex(4, -, 3)), /, 1))
ex(5, *, ex(ex(4, -, 3), +, ex(2, *, 1)))
ex(5, *, ex(1, +, ex(2, *, ex(4, -, 3))))
ex(5, *, ex(ex(4, -, 3), +, ex(2, /, 1)))
ex(5, *, ex(1, +, ex(2, /, ex(4, -, 3))))
ex(ex(5, *, ex(4, -, 3)), *, ex(1, +, 2))
ex(ex(5, *, 1), *, ex(ex(4, -, 3), +, 2))
ex(ex(5, /, ex(4, -, 3)), *, ex(1, +, 2))
ex(ex(5, /, 1), *, ex(ex(4, -, 3), +, 2))
ex(ex(1, +, 2), +, ex(4, +, ex(3, +, 5)))
ex(4, +, ex(ex(3, +, 5), +, ex(1, +, 2)))
ex(ex(3, +, 5), +, ex(4, +, ex(1, +, 2)))
ex(ex(1, +, 4), +, ex(2, +, ex(3, +, 5)))
ex(2, +, ex(ex(3, +, 5), +, ex(1, +, 4)))
ex(ex(3, +, 5), +, ex(2, +, ex(1, +, 4)))
ex(ex(1, +, ex(3, +, 5)), +, ex(2, +, 4))
ex(2, +, ex(4, +, ex(1, +, ex(3, +, 5))))
ex(4, +, ex(2, +, ex(1, +, ex(3, +, 5))))
ex(ex(2, *, 4), -, ex(1, -, ex(3, +, 5)))
ex(ex(ex(3, +, 5), -, 1), +, ex(2, *, 4))
ex(ex(2, +, 4), +, ex(1, +, ex(3, +, 5)))
ex(1, +, ex(ex(3, +, 5), +, ex(2, +, 4)))
ex(ex(3, +, 5), +, ex(1, +, ex(2, +, 4)))
ex(ex(2, *, 4), -, ex(1, -, ex(3, +, 5)))
ex(ex(3, +, 5), -, ex(1, -, ex(2, *, 4)))
ex(ex(2, *, 4), +, ex(ex(3, +, 5), -, 1))
ex(ex(3, +, 5), +, ex(ex(2, *, 4), -, 1))
ex(ex(ex(2, *, 4), +, ex(3, +, 5)), -, 1)
ex(ex(ex(3, +, 5), +, ex(2, *, 4)), -, 1)
ex(ex(2, *, 4), -, ex(1, -, ex(3, +, 5)))
ex(ex(3, +, 5), -, ex(1, -, ex(2, *, 4)))
ex(ex(2, *, 4), +, ex(ex(3, +, 5), -, 1))
ex(ex(3, +, 5), +, ex(ex(2, *, 4), -, 1))
ex(ex(ex(3, +, 5), *, ex(4, -, 2)), -, 1)
ex(ex(ex(3, +, 5), *, ex(4, /, 2)), -, 1)
ex(ex(2, +, ex(3, +, 5)), +, ex(1, +, 4))
ex(1, +, ex(4, +, ex(2, +, ex(3, +, 5))))
ex(4, +, ex(1, +, ex(2, +, ex(3, +, 5))))
ex(ex(ex(ex(3, +, 5), /, 2), *, 4), -, 1)
ex(ex(4, *, ex(ex(3, +, 5), /, 2)), -, 1)
ex(ex(4, +, ex(3, +, 5)), +, ex(1, +, 2))
ex(1, +, ex(2, +, ex(4, +, ex(3, +, 5))))
ex(2, +, ex(1, +, ex(4, +, ex(3, +, 5))))
ex(ex(ex(4, *, ex(3, +, 5)), /, 2), -, 1)
ex(ex(3, *, 5), *, ex(4, -, ex(1, +, 2)))
ex(ex(3, *, 5), /, ex(4, -, ex(1, +, 2)))
ex(ex(3, *, 5), *, ex(ex(4, -, 1), -, 2))
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ex(ex(3, *, 5), /, ex(ex(4, -, 1), -, 2))
ex(ex(3, *, 5), *, ex(ex(4, -, 2), -, 1))
ex(ex(3, *, 5), /, ex(ex(4, -, 2), -, 1))
ex(ex(3, *, 5), *, ex(ex(4, /, 2), -, 1))
ex(ex(3, *, 5), /, ex(ex(4, /, 2), -, 1))
ex(ex(ex(2, -, ex(3, -, 5)), *, 4), -, 1)
ex(ex(4, *, ex(2, -, ex(3, -, 5))), -, 1)
ex(ex(ex(5, -, 3), *, ex(2, *, 4)), -, 1)
ex(ex(2, *, ex(ex(5, -, 3), *, 4)), -, 1)
ex(ex(ex(ex(5, -, 3), +, 2), *, 4), -, 1)
ex(ex(ex(2, +, ex(5, -, 3)), *, 4), -, 1)
ex(ex(4, *, ex(ex(5, -, 3), +, 2)), -, 1)
ex(ex(4, *, ex(2, +, ex(5, -, 3))), -, 1)
ex(ex(ex(ex(5, -, 3), *, 2), *, 4), -, 1)
ex(ex(ex(2, *, ex(5, -, 3)), *, 4), -, 1)
ex(ex(4, *, ex(ex(5, -, 3), *, 2)), -, 1)
ex(ex(4, *, ex(2, *, ex(5, -, 3))), -, 1)
ex(ex(ex(5, -, 3), *, ex(4, *, 2)), -, 1)
ex(ex(2, *, ex(4, *, ex(5, -, 3))), -, 1)
ex(ex(1, +, 2), +, ex(3, +, ex(4, +, 5)))
ex(3, +, ex(ex(1, +, 2), +, ex(4, +, 5)))
ex(ex(1, +, 2), +, ex(ex(4, +, 5), +, 3))
ex(3, +, ex(ex(4, +, 5), +, ex(1, +, 2)))
ex(ex(4, +, 5), +, ex(ex(1, +, 2), +, 3))
ex(ex(4, +, 5), +, ex(3, +, ex(1, +, 2)))
ex(ex(ex(4, +, 5), *, ex(1, *, 2)), -, 3)
ex(ex(4, +, 5), +, ex(3, *, ex(1, *, 2)))
ex(ex(ex(4, +, 5), *, ex(2, /, 1)), -, 3)
ex(ex(4, +, 5), +, ex(3, *, ex(2, /, 1)))
ex(ex(1, +, 3), +, ex(2, +, ex(4, +, 5)))
ex(2, +, ex(ex(4, +, 5), +, ex(1, +, 3)))
ex(ex(4, +, 5), +, ex(2, +, ex(1, +, 3)))
ex(ex(2, *, ex(4, +, 5)), -, ex(1, *, 3))
ex(ex(4, +, 5), +, ex(2, *, ex(1, *, 3)))
ex(ex(2, *, ex(4, +, 5)), -, ex(3, /, 1))
ex(ex(4, +, 5), +, ex(2, *, ex(3, /, 1)))
ex(ex(1, +, ex(4, +, 5)), +, ex(2, +, 3))
ex(2, +, ex(3, +, ex(1, +, ex(4, +, 5))))
ex(ex(3, *, ex(1, +, ex(4, +, 5))), /, 2)
ex(3, +, ex(2, +, ex(1, +, ex(4, +, 5))))
ex(3, *, ex(ex(1, +, ex(4, +, 5)), /, 2))
ex(ex(1, *, ex(4, +, 5)), +, ex(2, *, 3))
ex(ex(2, *, ex(1, *, ex(4, +, 5))), -, 3)
ex(ex(ex(4, +, 5), /, 1), +, ex(2, *, 3))
ex(ex(2, *, ex(ex(4, +, 5), /, 1)), -, 3)
ex(ex(2, +, 3), +, ex(1, +, ex(4, +, 5)))
ex(1, +, ex(ex(4, +, 5), +, ex(2, +, 3)))
ex(ex(4, +, 5), +, ex(1, +, ex(2, +, 3)))
ex(ex(2, *, 3), +, ex(1, *, ex(4, +, 5)))
ex(ex(2, *, 3), +, ex(ex(4, +, 5), /, 1))
ex(1, *, ex(ex(4, +, 5), +, ex(2, *, 3)))
ex(ex(ex(4, +, 5), +, ex(2, *, 3)), /, 1)
ex(ex(4, +, 5), +, ex(1, *, ex(2, *, 3)))
ex(ex(4, +, 5), +, ex(ex(2, *, 3), /, 1))
ex(ex(2, +, ex(4, +, 5)), +, ex(1, +, 3))
ex(1, +, ex(3, +, ex(2, +, ex(4, +, 5))))
ex(3, +, ex(1, +, ex(2, +, ex(4, +, 5))))
ex(ex(2, *, ex(4, +, 5)), -, ex(1, *, 3))
ex(ex(2, *, ex(4, +, 5)), -, ex(3, /, 1))
ex(1, *, ex(ex(2, *, ex(4, +, 5)), -, 3))
ex(ex(ex(2, *, ex(4, +, 5)), -, 3), /, 1)
ex(ex(1, *, ex(2, *, ex(4, +, 5))), -, 3)
ex(ex(ex(2, *, ex(4, +, 5)), /, 1), -, 3)
ex(ex(3, +, ex(4, +, 5)), +, ex(1, +, 2))
ex(1, +, ex(2, +, ex(3, +, ex(4, +, 5))))
ex(2, +, ex(1, +, ex(3, +, ex(4, +, 5))))
ex(ex(ex(4, *, 5), -, 3), -, ex(1, *, 2))
ex(ex(ex(4, *, 5), -, ex(1, *, 2)), -, 3)
```

```
ex(ex(4, *, 5), -, ex(3, +, ex(1, *, 2)))
ex(ex(ex(4, *, 5), -, 3), -, ex(2, /, 1))
ex(ex(ex(4, *, 5), -, ex(2, /, 1)), -, 3)
ex(ex(4, *, 5), -, ex(3, +, ex(2, /, 1)))
ex(ex(ex(4, *, 5), -, 2), -, ex(1, *, 3))
ex(ex(ex(4, *, 5), -, ex(1, *, 3)), -, 2)
ex(ex(4, *, 5), -, ex(2, +, ex(1, *, 3)))
ex(ex(ex(4, *, 5), -, 2), -, ex(3, /, 1))
ex(ex(ex(4, *, 5), -, ex(3, /, 1)), -, 2)
ex(ex(4, *, 5), -, ex(2, +, ex(3, /, 1)))
ex(ex(1, +, ex(4, *, 5)), -, ex(2, *, 3))
ex(ex(1, *, ex(4, *, 5)), -, ex(2, +, 3))
ex(ex(ex(1, *, ex(4, *, 5)), -, 3), -, 2)
ex(ex(ex(1, *, ex(4, *, 5)), -, 2), -, 3)
ex(ex(ex(4, *, 5), /, 1), -, ex(2, +, 3))
ex(ex(ex(ex(4, *, 5), /, 1), -, 3), -, 2)
ex(ex(ex(ex(4, *, 5), /, 1), -, 2), -, 3)
ex(ex(1, *, ex(4, *, 5)), -, ex(2, +, 3))
ex(ex(ex(4, *, 5), /, 1), -, ex(2, +, 3))
ex(1, *, ex(ex(4, *, 5), -, ex(2, +, 3)))
ex(ex(ex(4, *, 5), -, ex(2, +, 3)), /, 1)
ex(ex(4, *, 5), -, ex(1, *, ex(2, +, 3)))
ex(ex(4, *, 5), -, ex(ex(2, +, 3), /, 1))
ex(ex(1, +, ex(4, *, 5)), -, ex(2, *, 3))
ex(1, +, ex(ex(4, *, 5), -, ex(2, *, 3)))
ex(1, -, ex(ex(2, *, 3), -, ex(4, *, 5)))
ex(ex(4, *, 5), +, ex(1, -, ex(2, *, 3)))
ex(ex(4, *, 5), -, ex(ex(2, *, 3), -, 1))
ex(ex(ex(4, *, 5), -, 2), -, ex(1, *, 3))
ex(ex(ex(4, *, 5), -, 2), -, ex(3, /, 1))
ex(1, *, ex(ex(ex(4, *, 5), -, 2), -, 3))
ex(ex(ex(ex(4, *, 5), -, 2), -, 3), /, 1)
ex(ex(1, *, ex(ex(4, *, 5), -, 2)), -, 3)
ex(ex(ex(ex(4, *, 5), -, 2), /, 1), -, 3)
ex(ex(ex(4, *, 5), -, 3), -, ex(1, *, 2))
ex(ex(ex(4, *, 5), -, 3), -, ex(2, /, 1))
ex(1, *, ex(ex(ex(4, *, 5), -, 3), -, 2))
ex(ex(ex(ex(4, *, 5), -, 3), -, 2), /, 1)
ex(ex(1, *, ex(ex(4, *, 5), -, 3)), -, 2)
ex(ex(ex(ex(4, *, 5), -, 3), /, 1), -, 2)

No
?- crypto(2,4,6,8,10,12,Soln).

Soln = ex(ex(10, *, ex(2, +, 4)), -, ex(6, *, 8)) ;

Soln = ex(ex(10, *, 6), -, ex(ex(2, +, 4), *, 8)) ;

Soln = ex(ex(ex(2, +, 4), *, 8), /, ex(10, -, 6)) ;

Soln = ex(ex(6, *, 8), /, ex(10, -, ex(2, +, 4))) ;

Soln = ex(ex(ex(2, +, 4), *, ex(6, +, 10)), /, 8) ;

Soln = ex(ex(6, *, ex(ex(2, +, 4), +, 10)), /, 8) ;

Soln = ex(ex(2, +, 4), *, ex(ex(6, +, 10), /, 8))

Yes
?- crypto(2,4,6,8,10,11,Soln).

Soln = ex(ex(2, +, 4), +, ex(10, /, ex(8, -, 6)))

Yes
?- crypto(2,4,6,8,10,-1,Soln).

Soln = ex(ex(10, /, ex(8, -, 6)), -, ex(2, +, 4))
```

```
Yes
?- crypto(2,4,6,8,10,10000000,Soln).

No
?- halt.
```