?- demo(100).
crypto_problem --> problem(numbers(0,8,7,5,4),goal(3))
considering rule 4 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(5,7,2,3,3),goal(6))
considering rule 4 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(5,1,8,8,7),goal(7))
considering rule 4 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(8,1,5,1,8),goal(1))
considering rule 4 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(3,5,3,6,1),goal(1))
considering rule 4 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(4,8,7,4,5),goal(6))
considering rule 4 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(9,4,6,7,4),goal(3))
considering rule 4 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(0,7,2,2,6),goal(4))
considering rule 4 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(3,7,6,4,1),goal(7))
considering rule 4 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(4,5,5,4,8),goal(1))
considering rule 4 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(8,6,5,1,9),goal(8))
considering rule 4 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(3,8,6,6,3),goal(3))
considering rule 4 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(4,5,6,4,5),goal(6))
considering rule 4 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(8,8,1,5,1),goal(1))

considering rule 4 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(7,7,7,6,2),goal(3))
considering rule 4 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(0,2,7,2,7),goal(8))
considering rule 4 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(9,2,8,6,5),goal(4))
considering rule 4 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(1,2,5,3,5),goal(2))
considering rule 4 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(9,2,1,4,4),goal(6))
considering rule 4 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(8,2,5,4,9),goal(6))
considering rule 4 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(2,2,9,8,5),goal(5))
considering rule 4 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(7,8,0,4,3),goal(0))
considering rule 4 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(8,7,8,1,0),goal(0))
considering rule 4 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(7,4,7,1,4),goal(5))
considering rule 4 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(8,6,8,3,8),goal(9))
considering rule 4 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(7,5,9,9,9),goal(8))
considering rule 4 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(1,9,8,1,1),goal(2))
considering rule 4 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(8,7,4,3,7),goal(2))
considering rule 4 ...

NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(5,0,0,3,0),goal(9))
considering rule 4 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(7,5,4,9,6),goal(0))
considering rule 4 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(6,3,3,3,5),goal(4))
considering rule 4 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(9,4,6,3,3),goal(2))
considering rule 4 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(7,9,9,4,5),goal(5))
considering rule 4 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(8,8,8,2,7),goal(7))
considering rule 4 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(9,0,5,0,9),goal(6))
considering rule 4 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(8,2,4,1,8),goal(5))
considering rule 4 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(3,5,8,5,1),goal(0))
considering rule 4 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(0,7,2,1,5),goal(8))
considering rule 4 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(4,5,2,3,6),goal(9))
considering rule 4 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(1,5,0,7,5),goal(1))
considering rule 4 ...
application of rule 4 produces solution: ((5 / 5) + (0 * (1 * 7)))
crypto_problem --> problem(numbers(8,4,4,3,1),goal(3))
considering rule 4 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(3,8,9,9,3),goal(3))
considering rule 4 ...
NO SOLUTION found with this rule base.

crypto_problem --> problem(numbers(8,3,7,6,6),goal(2))
considering rule 4 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(9,5,5,0,8),goal(9))
considering rule 4 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(1,2,1,9,4),goal(0))
considering rule 4 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(0,6,2,7,0),goal(2))
considering rule 4 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(0,2,2,3,6),goal(5))
considering rule 4 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(0,1,5,1,7),goal(5))
considering rule 4 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(7,7,2,4,6),goal(0))
considering rule 4 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(1,7,4,5,8),goal(0))
considering rule 4 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(0,2,7,8,1),goal(9))
considering rule 4 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(6,6,1,2,3),goal(3))
considering rule 4 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(2,8,4,7,2),goal(7))
considering rule 4 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(2,7,6,6,7),goal(8))
considering rule 4 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(6,4,6,7,0),goal(0))
considering rule 4 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(7,0,4,5,2),goal(5))
considering rule 4 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(3,3,7,1,6),goal(4))

considering rule 4 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(5,7,6,6,1),goal(1))
considering rule 4 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(6,4,7,3,0),goal(4))
considering rule 4 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(4,5,6,8,9),goal(2))
considering rule 4 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(3,2,3,3,3),goal(5))
considering rule 4 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(0,6,1,9,7),goal(0))
considering rule 4 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(3,6,6,3,7),goal(7))
considering rule 4 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(6,5,3,7,8),goal(3))
considering rule 4 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(3,6,9,9,1),goal(8))
considering rule 4 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(6,6,9,5,4),goal(8))
considering rule 4 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(7,8,8,0,1),goal(2))
considering rule 4 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(6,6,0,4,9),goal(7))
considering rule 4 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(8,3,6,2,8),goal(5))
considering rule 4 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(9,4,3,7,7),goal(0))
considering rule 4 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(6,2,4,6,9),goal(0))
considering rule 4 ...

NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(3,8,3,7,8),goal(4))
considering rule 4 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(5,9,7,6,4),goal(0))
considering rule 4 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(1,3,9,4,4),goal(1))
considering rule 4 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(3,8,3,8,6),goal(1))
considering rule 4 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(5,8,6,9,2),goal(3))
considering rule 4 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(6,2,3,8,2),goal(4))
considering rule 4 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(7,6,2,5,7),goal(5))
considering rule 4 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(8,8,7,3,2),goal(5))
considering rule 4 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(8,0,6,3,3),goal(2))
considering rule 4 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(6,3,2,8,2),goal(3))
considering rule 4 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(0,0,1,6,1),goal(8))
considering rule 4 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(7,9,9,6,0),goal(2))
considering rule 4 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(8,2,0,1,2),goal(1))
considering rule 4 ...
application of rule 4 produces solution: ((2 / 2) + (0 * (8 * 1)))
crypto_problem --> problem(numbers(0,7,7,8,9),goal(3))
considering rule 4 ...
NO SOLUTION found with this rule base.

crypto_problem --> problem(numbers(0,9,8,9,9),goal(1))
considering rule 4 ...
application of rule 4 produces solution: ((9 / 9) + (0 * (8 * 9)))
crypto_problem --> problem(numbers(1,8,0,4,6),goal(9))
considering rule 4 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(2,7,7,7,6),goal(4))
considering rule 4 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(8,2,1,6,5),goal(9))
considering rule 4 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(0,3,3,6,4),goal(4))
considering rule 4 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(4,2,3,9,7),goal(1))
considering rule 4 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(8,0,3,6,6),goal(9))
considering rule 4 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(3,6,3,6,9),goal(4))
considering rule 4 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(2,3,6,7,4),goal(3))
considering rule 4 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(4,8,1,1,4),goal(6))
considering rule 4 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(6,0,9,9,7),goal(5))
considering rule 4 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(8,5,0,8,4),goal(8))
considering rule 4 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(2,0,1,3,2),goal(3))
considering rule 4 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(0,8,6,2,7),goal(6))
considering rule 4 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(6,3,5,0,5),goal(3))

considering rule 4 ...
NO SOLUTION found with this rule base.

?- demo(100).
crypto_problem --> problem(numbers(8,8,7,2,0),goal(9))
considering rule 5 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(4,2,2,5,0),goal(9))
considering rule 5 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(7,5,4,1,3),goal(9))
considering rule 5 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(4,6,0,9,8),goal(2))
considering rule 5 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(2,9,2,4,8),goal(8))
considering rule 5 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(2,2,7,1,8),goal(4))
considering rule 5 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(4,8,1,1,7),goal(5))
considering rule 5 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(9,8,2,1,9),goal(6))
considering rule 5 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(8,1,5,0,0),goal(1))
considering rule 5 ...
application of rule 5 produces solution: ((0 + 1) + (0 * (8 * 5)))
crypto_problem --> problem(numbers(9,9,0,8,0),goal(8))
considering rule 5 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(7,2,0,8,5),goal(4))
considering rule 5 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(0,6,8,2,1),goal(5))
considering rule 5 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(6,0,9,1,7),goal(6))
considering rule 5 ...
NO SOLUTION found with this rule base.

crypto_problem --> problem(numbers(0,7,8,8,8),goal(8))
considering rule 5 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(8,2,1,9,7),goal(0))
considering rule 5 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(6,8,0,5,5),goal(7))
considering rule 5 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(1,0,0,6,5),goal(8))
considering rule 5 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(8,1,9,1,8),goal(7))
considering rule 5 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(0,4,2,1,7),goal(6))
considering rule 5 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(2,8,5,7,0),goal(0))
considering rule 5 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(4,3,6,7,7),goal(4))
considering rule 5 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(5,2,7,1,3),goal(3))
considering rule 5 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(1,6,0,4,6),goal(9))
considering rule 5 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(1,5,0,6,6),goal(6))
considering rule 5 ...
application of rule 5 produces solution: ((5 + 1) + (0 * (6 * 6)))
crypto_problem --> problem(numbers(8,2,0,6,9),goal(1))
considering rule 5 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(2,2,6,6,9),goal(4))
considering rule 5 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(3,3,8,5,7),goal(1))
considering rule 5 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(4,1,1,5,8),goal(5))

considering rule 5 ...

NO SOLUTION found with this rule base.

crypto_problem --> problem(numbers(7,9,3,3,4),goal(2))

considering rule 5 ...

NO SOLUTION found with this rule base.

crypto_problem --> problem(numbers(1,3,0,5,9),goal(4))

considering rule 5 ...

application of rule 5 produces solution: ((3 + 1) + (0 * (5 * 9)))

crypto_problem --> problem(numbers(3,0,7,0,0),goal(5))

considering rule 5 ...

NO SOLUTION found with this rule base.

crypto_problem --> problem(numbers(8,1,9,7,2),goal(9))

considering rule 5 ...

NO SOLUTION found with this rule base.

crypto_problem --> problem(numbers(7,1,3,1,6),goal(7))

considering rule 5 ...

NO SOLUTION found with this rule base.

crypto_problem --> problem(numbers(3,8,3,5,5),goal(1))

considering rule 5 ...

NO SOLUTION found with this rule base.

crypto_problem --> problem(numbers(1,9,9,7,0),goal(8))

considering rule 5 ...

application of rule 5 produces solution: ((7 + 1) + (0 * (9 * 9)))

crypto_problem --> problem(numbers(4,2,3,4,9),goal(2))

considering rule 5 ...

NO SOLUTION found with this rule base.

crypto_problem --> problem(numbers(3,3,4,9,4),goal(2))

considering rule 5 ...

NO SOLUTION found with this rule base.

crypto_problem --> problem(numbers(6,4,8,9,3),goal(0))

considering rule 5 ...

NO SOLUTION found with this rule base.

crypto_problem --> problem(numbers(2,4,4,2,6),goal(9))

considering rule 5 ...

NO SOLUTION found with this rule base.

crypto_problem --> problem(numbers(6,3,9,2,9),goal(0))

considering rule 5 ...

NO SOLUTION found with this rule base.

crypto_problem --> problem(numbers(4,4,4,2,4),goal(4))

considering rule 5 ...

NO SOLUTION found with this rule base.

crypto_problem --> problem(numbers(8,0,5,9,6),goal(5))

considering rule 5 ...

NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(6,1,6,4,8),goal(2))
considering rule 5 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(2,6,9,7,8),goal(2))
considering rule 5 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(9,6,2,3,3),goal(7))
considering rule 5 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(7,5,1,7,1),goal(0))
considering rule 5 …
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(6,8,1,2,3),goal(5))
considering rule 5 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(3,9,0,2,9),goal(4))
considering rule 5 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(2,9,0,7,8),goal(8))
considering rule 5 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(2,1,6,8,4),goal(9))
considering rule 5 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(8,8,8,1,2),goal(1))
considering rule 5 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(5,0,0,9,0),goal(2))
considering rule 5 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(5,2,6,8,7),goal(5))
considering rule 5 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(4,0,8,8,6),goal(8))
considering rule 5 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(4,3,2,9,3),goal(6))
considering rule 5 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(3,9,9,5,7),goal(5))
considering rule 5 ...
NO SOLUTION found with this rule base.

crypto_problem --> problem(numbers(9,6,6,7,1),goal(1))
considering rule 5 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(6,4,7,4,6),goal(1))
considering rule 5 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(4,3,3,1,1),goal(7))
considering rule 5 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(1,6,3,3,9),goal(0))
considering rule 5 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(2,8,7,9,7),goal(9))
considering rule 5 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(3,2,9,5,6),goal(3))
considering rule 5 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(8,1,3,7,9),goal(6))
considering rule 5 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(8,5,7,6,0),goal(1))
considering rule 5 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(9,6,0,9,5),goal(7))
considering rule 5 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(8,0,5,3,7),goal(1))
considering rule 5 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(4,6,3,9,0),goal(1))
considering rule 5 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(9,8,8,3,5),goal(6))
considering rule 5 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(4,5,4,9,8),goal(8))
considering rule 5 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(6,5,0,4,9),goal(2))
considering rule 5 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(9,1,5,4,7),goal(8))

considering rule 5 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(0,3,4,6,2),goal(8))
considering rule 5 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(5,1,5,6,0),goal(4))
considering rule 5 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(6,1,7,7,4),goal(2))
considering rule 5 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(2,2,9,0,1),goal(1))
considering rule 5 ...
application of rule 5NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(0,4,2,9,0),goal(7))
considering rule 5 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(3,5,0,6,1),goal(4))
considering rule 5 ...
application of rule 5 produces solution: ((3 + 1) + (0 * (5 * 6)))
crypto_problem --> problem(numbers(4,2,9,9,5),goal(8))
considering rule 5 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(6,9,2,6,7),goal(2))
considering rule 5 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(5,0,0,8,6),goal(5))
considering rule 5 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(4,9,7,0,3),goal(1))
considering rule 5 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(4,7,0,8,0),goal(1))
considering rule 5 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(6,2,3,7,7),goal(7))
considering rule 5 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(5,7,1,9,2),goal(4))
considering rule 5 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(6,2,1,7,8),goal(7))
considering rule 5 ...

NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(1,0,3,7,5),goal(7))
considering rule 5 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(0,2,9,6,8),goal(5))
considering rule 5 …
crypto_problem --> problem(numbers(0,2,9,6,8),goal(5))
considering rule 5 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(3,8,9,6,7),goal(2))
considering rule 5 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(8,7,2,5,0),goal(7))
considering rule 5 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(6,1,5,3,8),goal(7))
considering rule 5 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(8,6,7,3,8),goal(0))
considering rule 5 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(3,8,1,9,3),goal(5))
considering rule 5 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(3,5,0,3,5),goal(3))
considering rule 5 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(1,1,2,5,3),goal(8))
considering rule 5 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(7,6,4,1,0),goal(7))
considering rule 5 ...
application of rule 5 produces solution: ((6 + 1) + (0 * (7 * 4)))
crypto_problem --> problem(numbers(8,3,3,6,7),goal(3))
considering rule 5 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(4,5,9,2,8),goal(7))
considering rule 5 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(4,9,9,5,2),goal(0))
considering rule 5 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(2,7,3,2,0),goal(2))

considering rule 5 ...

NO SOLUTION found with this rule base.

crypto_problem --> problem(numbers(9,8,6,2,1),goal(7))

considering rule 5 ...

NO SOLUTION found with this rule base.

true

?- demo(100).
crypto_problem --> problem(numbers(5,6,7,9,8),goal(7))
considering rule 6 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(0,4,3,0,7),goal(7))
considering rule 6 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(8,5,9,1,7),goal(8))
considering rule 6 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(6,9,4,1,0),goal(6))
considering rule 6 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(4,4,4,0,0),goal(4))
considering rule 6 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(2,1,9,8,1),goal(5))
considering rule 6 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(3,1,7,8,3),goal(1))
considering rule 6 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(7,3,2,7,1),goal(0))
considering rule 6 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(9,6,3,8,6),goal(9))
considering rule 6 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(8,2,6,8,8),goal(8))
considering rule 6 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(1,2,1,6,3),goal(9))
considering rule 6 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(2,8,9,7,7),goal(8))
considering rule 6 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(0,8,1,0,9),goal(8))
considering rule 6 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(6,9,6,1,3),goal(9))

considering rule 6 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(6,6,3,7,3),goal(0))
considering rule 6 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(2,9,6,9,8),goal(2))
considering rule 6 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(5,4,9,1,2),goal(6))
considering rule 6 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(4,9,0,1,6),goal(7))
considering rule 6 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(0,0,6,5,1),goal(9))
considering rule 6 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(6,8,8,3,4),goal(4))
considering rule 6 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(8,4,8,8,2),goal(9))
considering rule 6 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(5,7,9,3,1),goal(8))
considering rule 6 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(2,5,5,4,3),goal(6))
considering rule 6 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(7,0,3,1,9),goal(4))
considering rule 6 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(6,7,8,6,7),goal(6))
considering rule 6 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(7,4,6,9,9),goal(5))
considering rule 6 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(4,3,6,4,5),goal(3))
considering rule 6 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(0,4,7,3,8),goal(0))
considering rule 6 ...

NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(8,6,4,9,2),goal(6))
considering rule 6 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(6,7,3,0,3),goal(8))
considering rule 6 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(8,6,0,0,4),goal(8))
considering rule 6 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(7,5,8,1,6),goal(4))
considering rule 6 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(6,1,3,3,3),goal(7))
considering rule 6 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(6,9,1,6,0),goal(5))
considering rule 6 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(7,2,8,5,6),goal(4))
considering rule 6 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(3,5,9,0,0),goal(2))
considering rule 6 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(0,6,8,8,8),goal(4))
considering rule 6 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(6,0,5,8,4),goal(5))
considering rule 6 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(7,6,3,2,0),goal(2))
considering rule 6 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(3,2,9,8,7),goal(6))
considering rule 6 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(6,6,5,2,0),goal(2))
considering rule 6 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(3,8,8,3,3),goal(8))
considering rule 6 ...
NO SOLUTION found with this rule base.

crypto_problem --> problem(numbers(1,5,1,6,9),goal(3))
considering rule 6 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(9,2,8,8,4),goal(3))
considering rule 6 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(9,1,5,8,6),goal(5))
considering rule 6 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(4,9,4,7,1),goal(7))
considering rule 6 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(0,7,6,3,1),goal(4))
considering rule 6 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(0,1,1,9,7),goal(1))
considering rule 6 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(1,2,1,8,6),goal(9))
considering rule 6 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(2,6,0,4,3),goal(2))
considering rule 6 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(1,4,0,0,5),goal(2))
considering rule 6 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(5,4,2,3,7),goal(4))
considering rule 6 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(9,8,1,1,9),goal(1))
considering rule 6 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(2,7,6,3,0),goal(4))
considering rule 6 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(9,7,6,8,8),goal(3))
considering rule 6 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(9,9,5,1,5),goal(3))
considering rule 6 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(8,0,5,1,0),goal(7))

considering rule 6 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(7,3,9,8,5),goal(5))
considering rule 6 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(6,6,6,4,5),goal(1))
considering rule 6 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(5,9,9,1,2),goal(1))
considering rule 6 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(2,3,8,3,5),goal(6))
considering rule 6 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(1,8,1,5,2),goal(0))
considering rule 6 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(1,5,2,2,8),goal(5))
considering rule 6 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(8,2,8,1,3),goal(5))
considering rule 6 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(9,0,1,8,4),goal(5))
considering rule 6 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(6,0,5,2,7),goal(7))
considering rule 6 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(8,6,8,7,2),goal(8))
considering rule 6 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(6,3,6,5,1),goal(0))
considering rule 6 ...
NO SOLUTION found with this rule base.

crypto_problem --> problem(numbers(9,1,5,0,7),goal(9))
considering rule 6 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(0,4,2,3,1),goal(8))
considering rule 6 ...
NO SOLUTION found with this rule base.

crypto_problem --> problem(numbers(9,6,7,5,2),goal(1))
considering rule 6 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(3,0,2,7,9),goal(2))
considering rule 6 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(8,7,0,1,7),goal(9))
considering rule 6 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(2,7,9,1,6),goal(8))
considering rule 6 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(9,7,6,3,3),goal(6))
considering rule 6 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(2,8,5,6,6),goal(5))
considering rule 6 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(5,9,9,2,1),goal(5))
considering rule 6 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(5,8,3,0,5),goal(7))
considering rule 6 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(8,0,5,9,5),goal(1))
considering rule 6 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(9,1,5,4,7),goal(2))
considering rule 6 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(9,0,8,4,4),goal(1))
considering rule 6 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(2,0,4,0,7),goal(9))
considering rule 6 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(3,1,5,0,0),goal(8))
considering rule 6 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(6,4,2,5,6),goal(5))
considering rule 6 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(1,7,9,9,1),goal(1))

considering rule 6 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(8,9,3,7,0),goal(4))
considering rule 6 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(2,5,4,2,9),goal(3))
considering rule 6 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(7,1,6,0,5),goal(8))
considering rule 6 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(1,6,6,0,1),goal(1))
considering rule 6 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(8,8,5,6,7),goal(3))
considering rule 6 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(1,8,1,6,8),goal(8))
considering rule 6 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(9,4,2,3,4),goal(8))
considering rule 6 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(8,2,2,2,0),goal(2))
considering rule 6 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(8,8,7,6,5),goal(2))
considering rule 6 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(3,1,5,6,3),goal(0))
considering rule 6 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(8,4,1,2,9),goal(9))
considering rule 6 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(9,1,5,0,0),goal(6))
considering rule 6 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(6,6,1,5,1),goal(5))
considering rule 6 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(5,2,6,9,5),goal(3))
considering rule 6 ...

NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(2,5,1,2,9),goal(2))
considering rule 6 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(6,8,8,0,0),goal(7))
considering rule 6 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(5,4,8,2,3),goal(5))
considering rule 6 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(6,9,4,1,0),goal(8))
considering rule 6 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(8,0,2,5,9),goal(9))
considering rule 6 ...
NO SOLUTION found with this rule base.

?- demo(100).
crypto_problem --> problem(numbers(2,5,6,0,8),goal(1))
considering rule 7 ...
application of rule 7NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(0,6,9,4,9),goal(9))
considering rule 7 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(6,3,9,4,7),goal(6))
considering rule 7 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(0,9,4,5,5),goal(1))
considering rule 7 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(7,2,0,6,8),goal(7))
considering rule 7 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(8,8,8,0,0),goal(4))
considering rule 7 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(1,7,8,2,7),goal(6))
considering rule 7 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(3,9,5,6,2),goal(2))
considering rule 7 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(6,0,0,0,5),goal(1))
considering rule 7 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(9,9,7,9,5),goal(0))
considering rule 7 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(8,5,0,7,9),goal(9))
considering rule 7 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(7,4,9,9,0),goal(3))
considering rule 7 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(1,6,2,0,1),goal(1))
considering rule 7 ...
application of rule 7NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(4,4,4,9,0),goal(5))

considering rule 7 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(8,3,9,2,6),goal(4))
considering rule 7 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(4,4,1,6,7),goal(6))
considering rule 7 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(9,8,2,2,5),goal(1))
considering rule 7 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(5,1,6,1,3),goal(0))
considering rule 7 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(1,5,0,6,0),goal(7))
considering rule 7 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(6,3,6,4,5),goal(7))
considering rule 7 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(5,4,8,6,9),goal(4))
considering rule 7 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(6,4,1,3,2),goal(5))
considering rule 7 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(5,5,9,1,9),goal(6))
considering rule 7 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(7,6,4,9,5),goal(6))
considering rule 7 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(1,2,7,6,6),goal(6))
considering rule 7 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(2,2,3,6,5),goal(2))
considering rule 7 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(6,5,2,8,5),goal(1))
considering rule 7 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(1,8,7,2,0),goal(6))
considering rule 7 ...

NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(5,7,7,4,3),goal(7))
considering rule 7 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(5,3,2,8,8),goal(2))
considering rule 7 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(8,4,0,6,2),goal(9))
considering rule 7 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(4,3,0,7,3),goal(6))
considering rule 7 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(3,6,8,2,8),goal(1))
considering rule 7 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(7,6,8,3,1),goal(3))
considering rule 7 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(4,9,8,5,0),goal(0))
considering rule 7 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(9,4,7,4,1),goal(0))
considering rule 7 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(6,9,0,7,9),goal(7))
considering rule 7 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(3,0,0,8,3),goal(3))
considering rule 7 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(3,8,9,4,3),goal(8))
considering rule 7 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(6,5,6,1,3),goal(2))
considering rule 7 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(8,5,3,4,4),goal(3))
considering rule 7 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(1,5,3,7,4),goal(7))
considering rule 7 ...
NO SOLUTION found with this rule base.

crypto_problem --> problem(numbers(9,1,0,4,9),goal(0))
considering rule 7 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(8,5,1,4,9),goal(3))
considering rule 7 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(4,6,7,0,5),goal(5))
considering rule 7 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(2,0,5,2,0),goal(9))
considering rule 7 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(3,9,5,9,3),goal(8))
considering rule 7 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(2,9,9,9,3),goal(4))
considering rule 7 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(1,9,9,6,5),goal(6))
considering rule 7 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(1,5,7,0,0),goal(5))
considering rule 7 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(1,1,9,9,0),goal(2))
considering rule 7 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(7,5,5,1,5),goal(3))
considering rule 7 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(9,7,6,9,8),goal(8))
considering rule 7 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(3,0,0,5,5),goal(0))
considering rule 7 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(6,9,1,2,3),goal(6))
considering rule 7 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(6,2,3,6,0),goal(7))
considering rule 7 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(8,3,6,3,9),goal(7))

considering rule 7 ...

NO SOLUTION found with this rule base.

crypto_problem --> problem(numbers(8,9,1,4,7),goal(2))

considering rule 7 ...

NO SOLUTION found with this rule base.

crypto_problem --> problem(numbers(3,0,7,7,1),goal(4))

considering rule 7 ...

NO SOLUTION found with this rule base.

crypto_problem --> problem(numbers(1,6,1,1,0),goal(6))

considering rule 7 ...

NO SOLUTION found with this rule base.

crypto_problem --> problem(numbers(1,6,5,9,2),goal(5))

considering rule 7 ...

NO SOLUTION found with this rule base.

crypto_problem --> problem(numbers(3,1,9,5,7),goal(7))

considering rule 7 ...

NO SOLUTION found with this rule base.

crypto_problem --> problem(numbers(1,5,8,9,6),goal(0))

considering rule 7 ...

NO SOLUTION found with this rule base.

crypto_problem --> problem(numbers(0,3,4,0,8),goal(9))

considering rule 7 ...

NO SOLUTION found with this rule base.

crypto_problem --> problem(numbers(6,9,4,6,3),goal(9))

considering rule 7 ...

NO SOLUTION found with this rule base.

crypto_problem --> problem(numbers(3,4,8,2,3),goal(9))

considering rule 7 ...

NO SOLUTION found with this rule base.

crypto_problem --> problem(numbers(7,8,8,6,7),goal(7))

considering rule 7 ...

NO SOLUTION found with this rule base.

crypto_problem --> problem(numbers(0,6,5,4,4),goal(0))

considering rule 7 ...

NO SOLUTION found with this rule base.

crypto_problem --> problem(numbers(8,6,7,1,2),goal(3))

considering rule 7 ...

NO SOLUTION found with this rule base.

crypto_problem --> problem(numbers(0,2,4,4,0),goal(4))

considering rule 7 ...

NO SOLUTION found with this rule base.

crypto_problem --> problem(numbers(7,3,4,7,3),goal(7))

considering rule 7 ...

NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(8,1,3,4,4),goal(6))
considering rule 7 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(5,2,3,0,9),goal(9))
considering rule 7 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(7,3,3,0,0),goal(3))
considering rule 7 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(8,1,5,7,0),goal(2))
considering rule 7 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(8,3,7,4,1),goal(2))
considering rule 7 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(7,3,0,0,8),goal(1))
considering rule 7 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(5,8,2,1,4),goal(8))
considering rule 7 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(1,7,6,7,1),goal(3))
considering rule 7 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(0,1,5,9,5),goal(0))
considering rule 7 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(1,7,9,9,5),goal(5))
considering rule 7 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(2,4,3,3,1),goal(0))
considering rule 7 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(1,2,2,3,7),goal(7))
considering rule 7 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(5,4,9,2,9),goal(2))
considering rule 7 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(9,7,8,4,4),goal(8))
considering rule 7 ...
NO SOLUTION found with this rule base.

crypto_problem --> problem(numbers(9,4,4,9,0),goal(3))
considering rule 7 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(7,4,9,5,9),goal(5))
considering rule 7 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(9,4,9,2,2),goal(8))
considering rule 7 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(4,7,4,0,0),goal(7))
considering rule 7 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(1,0,6,4,8),goal(3))
considering rule 7 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(9,5,0,0,0),goal(4))
considering rule 7 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(0,8,2,8,0),goal(6))
considering rule 7 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(9,1,0,8,4),goal(6))
considering rule 7 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(3,5,6,2,0),goal(0))
considering rule 7 ...
application of rule 7NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(7,0,1,3,7),goal(4))
considering rule 7 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(4,6,3,5,6),goal(3))
considering rule 7 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(4,4,9,5,2),goal(0))
considering rule 7 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(7,4,8,2,1),goal(1))
considering rule 7 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(3,5,3,4,0),goal(8))
considering rule 7 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(3,7,8,7,9),goal(9))

considering rule 7 ...
NO SOLUTION found with this rule base.

crypto_problem --> problem(numbers(5,7,0,5,1),goal(1))
considering rule 8 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(4,0,0,4,6),goal(3))
considering rule 8 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(9,9,9,3,2),goal(9))
considering rule 8 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(3,8,6,2,5),goal(4))
considering rule 8 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(3,8,9,1,4),goal(4))
considering rule 8 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(6,4,4,5,1),goal(2))
considering rule 8 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(0,9,3,3,7),goal(6))
considering rule 8 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(0,5,4,5,3),goal(4))
considering rule 8 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(7,3,4,4,2),goal(6))
considering rule 8 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(7,3,3,3,9),goal(6))
considering rule 8 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(8,3,0,6,1),goal(3))
considering rule 8 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(1,4,8,6,1),goal(4))
considering rule 8 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(1,4,8,5,1),goal(1))
considering rule 8 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(5,6,1,9,6),goal(5))
considering rule 8 ...

NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(3,4,9,9,6),goal(9))
considering rule 8 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(2,5,8,8,1),goal(8))
considering rule 8 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(0,8,6,7,3),goal(5))
considering rule 8 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(0,2,9,8,0),goal(3))
considering rule 8 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(7,0,8,3,4),goal(8))
considering rule 8 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(3,3,2,8,9),goal(5))
considering rule 8 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(8,6,5,8,8),goal(1))
considering rule 8 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(5,9,0,1,0),goal(0))
considering rule 8 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(1,3,7,4,3),goal(0))
considering rule 8 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(6,0,1,9,6),goal(0))
considering rule 8 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(6,1,7,8,1),goal(5))
considering rule 8 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(1,9,6,7,6),goal(9))
considering rule 8 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(0,6,0,5,0),goal(9))
considering rule 8 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(7,7,4,0,9),goal(6))
considering rule 8 ...
NO SOLUTION found with this rule base.

crypto_problem --> problem(numbers(2,0,8,8,5),goal(3))
considering rule 8 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(0,4,3,7,9),goal(5))
considering rule 8 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(9,3,2,4,5),goal(7))
considering rule 8 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(9,2,9,0,4),goal(9))
considering rule 8 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(4,9,6,2,3),goal(5))
considering rule 8 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(5,0,0,0,7),goal(6))
considering rule 8 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(7,1,8,1,3),goal(5))
considering rule 8 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(8,3,0,3,6),goal(7))
considering rule 8 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(0,0,2,0,7),goal(9))
considering rule 8 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(0,9,2,3,0),goal(2))
considering rule 8 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(0,9,2,3,0),goal(2))
considering rule 8 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(2,9,3,3,3),goal(6))
considering rule 8 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(4,4,9,3,3),goal(3))
considering rule 8 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(4,0,9,7,4),goal(5))
considering rule 8 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(6,4,4,2,4),goal(2))

considering rule 8 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(9,2,5,4,1),goal(0))
considering rule 8 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(5,0,5,4,0),goal(8))
considering rule 8 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(4,5,4,1,9),goal(6))
considering rule 8 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(1,1,5,4,8),goal(3))
considering rule 8 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(8,0,8,6,8),goal(1))
considering rule 8 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(9,4,8,2,4),goal(5))
considering rule 8 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(8,5,8,4,2),goal(1))
considering rule 8 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(2,9,3,3,1),goal(0))
considering rule 8 ...
NO SOLUTION found with this rule base.

crypto_problem --> problem(numbers(7,9,0,7,1),goal(7))
considering rule 8 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(1,1,6,4,3),goal(4))
considering rule 8 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(6,0,0,1,7),goal(0))
considering rule 8 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(8,3,9,1,9),goal(0))
considering rule 8 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(3,0,7,3,8),goal(1))
considering rule 8 ...
NO SOLUTION found with this rule base.

crypto_problem --> problem(numbers(5,9,4,1,5),goal(0))
considering rule 8 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(8,1,9,1,1),goal(9))
considering rule 8 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(2,5,2,6,8),goal(8))
considering rule 8 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(4,9,5,4,5),goal(9))
considering rule 8 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(8,3,7,2,3),goal(2))
considering rule 8 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(9,1,9,5,3),goal(4))
considering rule 8 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(7,1,8,1,8),goal(4))
considering rule 8 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(3,6,6,0,4),goal(6))
considering rule 8 ...
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crypto_problem --> problem(numbers(2,3,7,4,3),goal(7))
considering rule 8 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(9,9,3,1,3),goal(3))
considering rule 8 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(2,4,3,5,9),goal(7))
considering rule 8 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(6,6,0,1,4),goal(8))
considering rule 8 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(5,4,1,8,1),goal(8))
considering rule 8 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(6,2,0,1,3),goal(4))
considering rule 8 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(7,4,3,4,0),goal(4))

considering rule 8 ...

NO SOLUTION found with this rule base.

crypto_problem --> problem(numbers(2,0,1,0,1),goal(9))

considering rule 8 ...

NO SOLUTION found with this rule base.

crypto_problem --> problem(numbers(1,2,0,7,2),goal(8))

considering rule 8 ...

NO SOLUTION found with this rule base.

crypto_problem --> problem(numbers(9,5,3,0,4),goal(5))

considering rule 8 ...

NO SOLUTION found with this rule base.

crypto_problem --> problem(numbers(3,8,7,3,4),goal(8))

considering rule 8 ...

NO SOLUTION found with this rule base.

crypto_problem --> problem(numbers(9,8,5,9,3),goal(5))

considering rule 8 ...

NO SOLUTION found with this rule base.

crypto_problem --> problem(numbers(6,5,6,0,2),goal(6))

considering rule 8 ...

NO SOLUTION found with this rule base.

crypto_problem --> problem(numbers(9,0,4,4,8),goal(2))

considering rule 8 ...

NO SOLUTION found with this rule base.

crypto_problem --> problem(numbers(9,1,3,7,2),goal(0))

considering rule 8 ...

NO SOLUTION found with this rule base.

crypto_problem --> problem(numbers(3,7,4,6,3),goal(5))

considering rule 8 ...

NO SOLUTION found with this rule base.

crypto_problem --> problem(numbers(5,1,0,4,8),goal(8))

considering rule 8 ...

NO SOLUTION found with this rule base.

crypto_problem --> problem(numbers(2,0,5,6,7),goal(6))

considering rule 8 ...

NO SOLUTION found with this rule base.

crypto_problem --> problem(numbers(9,2,3,1,2),goal(2))

considering rule 8 ...

NO SOLUTION found with this rule base.

crypto_problem --> problem(numbers(8,4,8,6,2),goal(2))

considering rule 8 ...

NO SOLUTION found with this rule base.

crypto_problem --> problem(numbers(5,3,3,3,1),goal(3))

considering rule 8 ...

NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(9,7,2,2,2),goal(1))
considering rule 8 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(8,6,5,5,8),goal(4))
considering rule 8 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(7,4,8,4,8),goal(9))
considering rule 8 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(8,9,2,8,0),goal(7))
considering rule 8 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(8,9,7,6,6),goal(1))
considering rule 8 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(4,1,3,8,1),goal(3))
considering rule 8 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(9,2,9,6,9),goal(5))
considering rule 8 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(9,7,9,5,3),goal(3))
considering rule 8 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(4,6,2,4,3),goal(0))
considering rule 8 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(1,2,7,1,6),goal(6))
considering rule 8 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(0,4,8,8,3),goal(4))
considering rule 8 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(3,9,1,3,8),goal(0))
considering rule 8 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(9,7,9,2,4),goal(7))
considering rule 8 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(5,9,8,7,5),goal(8))
considering rule 8 ...
NO SOLUTION found with this rule base.

crypto_problem --> problem(numbers(7,7,3,1,6),goal(5))
considering rule 8 ...
NO SOLUTION found with this rule base.
crypto_problem --> problem(numbers(8,8,4,5,1),goal(0))
considering rule 8 ...
NO SOLUTION found with this rule base.
true.

	Applicability
Heuristic 4	0.03
Heuristic 5	0.06
Heuristic 6	0.00
Heuristic 7	0.00
Heuristic 8	0.00