```
1.
'A = {'a', 'b', 'd', 'c'}, B = {'w', 'v', 'z', 'y', 'x'}, f = [('a', 'z'), ('b', 'y'), ('c', 'x'), ('d', 'w')]
* The relation is a function.
* The relation is injective.
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2.
'A = ['a', 'b', 'c', 'd'], B = ['x', 'y', 'z'], f = [('a', 'z'), ('b', 'y'), ('c', 'x'), ('d', 'z')]
* The relation is a function.
* The relation is surjective.
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3.
'A = ['a', 'b', 'c', 'd'], B = ['w', 'x', 'y', 'z'], f = [('a', 'z'), ('b', 'y'), ('c', 'x'), ('d', 'w')]
* The relation is a function.
* The relation is bijective.
* Inverse: [('z', 'a'), ('y', 'b'), ('x', 'c'), ('w', 'd')]
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4.
'A = ['a', 'b', 'c', 'd'], B = [1, 2, 3, 4, 5], f = [('a', 4), ('b', 5), ('c', 1), ('d', 3)]
* The relation is a function.
* The relation is injective.
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5.
'A = ['a', 'b', 'c'], B = [1, 2, 3, 4], f = [('a', 3), ('b', 4), ('c', 1)]
* The relation is a function.
* The relation is injective.
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6.
'A = ['a', 'b', 'c', 'd'], B = [1, 2, 3], f = [('a', 2), ('b', 1), ('c', 3), ('d', 2)]
* The relation is a function.
* The relation is surjective.
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7.
'A = ['a', 'b', 'c', 'd'], B = [1, 2, 3, 4], f = [('a', 4), ('b', 1), ('c', 3), ('d', 2)]
* The relation is a function.
* The relation is bijective.
* Inverse: [(4, 'a'), (1, 'b'), (3, 'c'), (2, 'd')]
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8.
'A = ['a', 'b', 'c', 'd'], B = [1, 2, 3, 4], f = [('a', 2), ('b', 1), ('c', 2), ('d', 3)]
* The relation is a function.
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9.
'A = ['a', 'b', 'c'], B = [1, 2, 3, 4], f = [('a', 2), ('b', 1), ('a', 4), ('c', 3)]
* The relation is not a function.
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