

- 1.)  $f$  is a function that is injective.
- 2.)  $f$  is a function that is surjective.
- 3.)  $f$  is a function that is bijective with an inverse function of:  $[('z', 'a'), ('y', 'b'), ('x', 'c'), ('w', 'd')]$ .
- 4.)  $f$  is a function that is injective.
- 5.)  $f$  is a function that is injective.
- 6.)  $f$  is a function that is surjective.
- 7.)  $f$  is a function that is bijective with an inverse function of:  $[(4, 'a'), (1, 'b'), (3, 'c'), (2, 'd')]$ .
- 8.)  $f$  is a function that is neither injective nor surjective.
- 9.)  $f$  is not a function.