Short Logic Quiz (1) **name:**_____

[Date]

max. 3 points

a) Define "sentence of FOL." *[You can draw on the notion of a well-formed formula.]*
[1pt – all or nothing]

b) Explain what it is for variables to be free and what it is for them to be bound.
[1pt – all or nothing]

c) True or False?
[1pt – all or nothing]

1. The truth value of quantified statements cannot be computed by drawing on the truth values of their component parts.

☐ **True** ☐ **False**

2. An open sentence "S(x)," when prefixed by an existential quantifier, is true if all objects in the domain of discourse satisfy "S(x)."

☐ **True** ☐ **False**

3. One must, to form quantified expressions of FOL, prefix a suitable quantifier to a well-formed formula that contains free variables.

☐ **True** ☐ **False**