(1) The following statement is false.

If \( f \) is continuous at \( a \) and \( g \) is continuous at \( a \), then \((f \circ g)(x) = f(g(x))\) is continuous at \( a \).

(a) Give the true version of the statement. HINT: It’s in your notes.
(b) Give an example that shows the statement is false.