2. [10 points] Indicate if each of the following statements are true or false by circling the correct answer. No justification is required.

a. [2 points] Let g be the inverse of the function f. If a and b are constants such that $a = f(b)$, then $b = g(a)$.

True False

b. [2 points] The line $2x - 3y + 100 = 0$ is perpendicular to the line $12y + 18x = 1$.

True False

c. [2 points] Some of the values of the function K are given in the table.

u	-3	-1	2
$K(u)$	2	3	4

The function K could be linear.

True False

d. [2 points] Some of the values of the function Q are given in the table.

z	-3	-1	1	3
$Q(z)$	5	0.5	-2	-4

The graph of the function Q could be concave up .

True False

e. [2 points] If $f(x) = 2x + 1$ and $g(x) = x^2 + 1$ then $f(g(x)) = 2x^2 + 3$.

True False