5. [5 points]

a. On the axes below, part of the graph of a function y = f(x) is given. Either draw in the rest of the graph to make the function **even**, or briefly explain why this is not possible.



b. On the axes below, part of the graph of a function y = g(x) is given. Either draw in the rest of the graph to make the function **odd**, or briefly explain why this is not possible.



NOT POSSIBLE

Explanation: Not possible. Note that 0 is in the domain, with g(0) = -1. If g were odd, then we would have g(-0) = -(-1) =1, but g(-0) = g(0), so we would need to have two different values for g(0), which isn't allowed for a function.

(Note that it isn't quite true that any odd function must pass through the origin there is also the possibility that 0 is not in the domain. For example, the function y = 1/x is odd, even though it does not pass through the origin.)