2) (10 pts) ANL (Algorithm Analysis)

An algorithm that processes a grid of R rows and C columns runs in O(RlgC) time. It turns out that for any R by C grid, we can transpose the grid so that it has C rows and R columns instead and solve the problem on that grid to get the same answer. Fred ran the code with $R = 10^6$ and $C = 10^2$ and it took **3 hours** to run. Shanille transposed the grid and reran the code with $R = 10^2$ and $C = 10^6$ to prove to Fred how inefficient his technique was. How long, **in seconds,** would be expect Shanille's execution of the code to take? **Please answer as a decimal to two places.**