7. [4 points] Find all possible solutions \( w \) to the equation \( \frac{2e^{9(w-1)}}{7} = 3 \). Be sure to show all your steps, give your answer in exact form, and circle your final answer.

8. [5 points] Consider the function

\[
R(q) = \frac{5q + 3}{4 - q}
\]

Find a formula for its inverse. Be sure to show all your steps, and circle your final answer.