Homework 7. Due Nov. 5

179/2, 4
188-89/1, 2, 3, 4, 6, 8

9. Find the widest strip \( \{ z : |\text{Im} z| < a \} \) on which the \( 2\pi \) periodic function

\[
f(z) = \frac{1}{2 + e^{iz}}
\]

is analytic.