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MAT342 Quiz 2
Wednesday, February 27

1. State the Cauchy-Riemann equations, and define what it means for a function f to be analytic at a point $z_0 \in \mathbb{C}$.

2. Consider the function given by $f(z) = \log(e^{iz} + e^{-iz} - 2)$.
State a domain on which f is analytic (if one exists), and another on which f is not analytic (if one exists). Fully justify both answers.