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Assignment 7 - Complex trigonometric and hyperbolic functions
Due April 2nd

1. (0.5 pts each) Let $z = 1 + i$. Compute the following, give your answer in cartesian coordinates:

   a) $\cos z$

   b) $\sin z$

   c) $\tan z$

2. (0.5 pts each) Let $z = 1 + i$. Compute the following, give your answer in cartesian coordinates:

   a) $\cosh z$

   b) $\sinh z$

   c) $\tanh z$

3. (1 pt each) Let $L_1 = \{x | x \geq 0\}$, $L_2 = \{iy | y \geq 0\}$ and $R = \{x+iy | x,\ y \geq 0\}$

   a) Draw $\cos(L_1)$, $\cos(L_2)$ and $\cos(R)$

   b) Draw $\cosh(L_1)$, $\cosh(L_2)$ and $\cosh(R)$