

HW #02

Due: 01/30/2019

1. If the real part of an analytic function, $f(z)$, is given as

$$u = \frac{x^2 - y^2}{(x^2 + y^2)^2},$$

find the imaginary part, $v(x, y)$, and $f(z)$ as a function of z .

2. Evaluate

$$2^i.$$