

## Homework7

1. Discuss the continuity of the function.

$$f(x, y, z) = \frac{\sin z}{e^x + e^y}$$

2. Find the  $f_x, f_y$

$$f(x, y) = \arccos(xy)$$

3. Find the total differential.

$$f(x, y) = e^{-x} \tan y$$