**Problem 1.1)**

**Convert the following to polar form:**

**Problem 1.2)**

**Convert the following to rectangular form:**

**Problem 1.3)**

**Evaluate the following and give the answer in both rectangular and polar form.**

1. **Conjugate:**

0

**Problem 1.4)**











**Problem 1.5)**

**(a)**

**(b)**

**(c)**

clc; clear all; close all

z\_a = exp(-i\*(pi/4)) + exp(i\*(pi/4))

mag\_z\_a = abs(z\_a)

phase\_z\_a = angle(z\_a)

z\_b = 1 + exp(-2i\*(pi/3)) + exp(2i\*(pi/3))

mag\_z\_b = abs(z\_b)

phase\_z\_b = angle(z\_b)

**Problem 1.6)**