

ECET341 Homework 1

1. Suppose  $a = 1 + j$ ,  $b = 3 + j4$ , Find

- (1)  $|a|$
- (2)  $|ab|$
- (3)  $a^*$
- (4)  $ab$
- (5)  $\text{Arg}(a)$

2. Find the polar form of the complex number  $(1+j)$

3. Suppose  $a = 5\angle 30^\circ$ ,  $b = 2\angle 45^\circ$ , Find

- (1)  $\text{Arg}(a)$
- (2)  $\text{Arg}(ab)$
- (3)  $\text{Arg}(a/b)$
- (4)  $ab$