## ENGR 2910: Circuit Analysis I

Quiz 9: Monday, Nov. 22

## Question 1 [4]

You have the following complex number:

$$z = 12 + \jmath 3$$

Here, 
$$j = \sqrt{-1}$$
.

(i) What is:  $z + z^*$ ?

(ii) What is:  $z - z^*$ ?

(iii) What is:  $-z + z^*$ ?

(iv) What is:  $-z - z^*$ ?



Instructor: Leo Silbert

## ${\bf Question} \,\, {\bf 2} \,\, [6]$

You have the following two complex numbers:

$$x = 8 + \jmath 16 \text{ and } y = 12 + \jmath 3$$

(i) What is: x + y?

- (ii) What is: x y?
- (iii) What is:  $x + y^*$ ?

- (iv) What is:  $x y^*$ ?
- (v) What is:  $x^* + y$ ?

(vi) What is:  $x^* - y$ ?