

NAME:

Honor Code:

KEY

ECE 460 - QUIZ 1

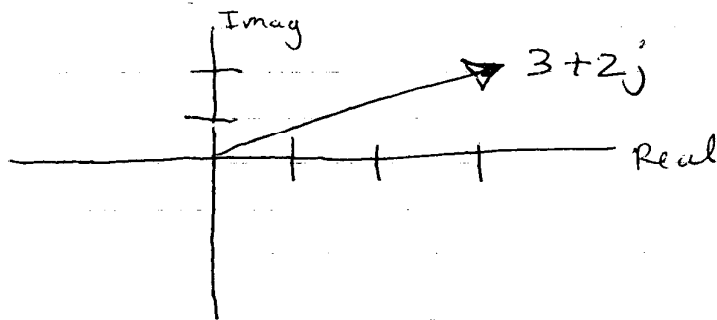
Perform the following manipulations:

1.  $j * j = \underline{-1}$

2.  $3 \angle 10^\circ + (2 - 7j) = (2.954 + j0.521) + (2 - 7j)$   
 $= \underline{4.954 + -6.479j}$

3.  $(8 + j) * 3 e^{j10^\circ} = (\sqrt{65} \angle 7.125^\circ) (3 \angle 10^\circ)$   
 $= \underline{3\sqrt{65} \angle 17.125^\circ}$

4. Plot  $3 + 2j$



5. Plot  $3 e^{-20^\circ j} = 2.819 + (-1.026j)$

