

MAC1105 College Algebra  
1.3 Practice Problems

1. Simplify the expression, writing your answer in  $a+bi$  form.

a)  $6 - (-5 + 4i) - (-13 - i)$

b)  $(7 - 5i)(-2 - 3i)$

c)  $\frac{8i}{4 - 3i}$

d)  $(-3 + \sqrt{-4})^2$

e.  $(7-4i)+(3-2i)$

f.  $(-2+7i)-(5+6i)$

g.  $(2+5i)^2$

h.  $\sqrt{-81}\cdot\sqrt{-36}$

i.  $i^{37}$