

Name: \_\_\_\_\_ Quiz Score: \_\_\_\_\_/20

**Quiz 6: Monday, March 9, 2015**

*No calculators.*

1. (6 pts) Find each of the following.

(a)  $\operatorname{Re}(13 - 5i) =$

(b)  $\operatorname{Im}(13 - 5i) =$

(c)  $\overline{13 - 5i} =$

(d)  $\operatorname{Re}(-67) =$

(e)  $\operatorname{Im}(-67) =$

(f)  $\overline{-67} =$

2. (6 pts) Write the following in standard form.

(a) the additive inverse of  $4 - 3i$

(b)  $(2 + 4i) - (1 - 3i) + (5 - 2i)$

(c)  $(8 - 3i)(-5 - 2i)$

3. (8 pts) Find all pairs of real numbers  $(x, y)$  satisfying:

$$(x + 2i)(x - i) = 9 - yi$$