

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

**Quiz 8: Friday, April 3, 2015**

*No calculators.*

1. (6 pts) Let  $z = \frac{1}{2} - \frac{1}{3}i$ . Find  $\frac{1}{z}$ , writing it in standard form, simplified.

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2. (7 pts) Write  $z = 3 - 3\sqrt{3}i$  in polar form, using the principal value of the argument.

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3. (7 pts) Write  $z = \sqrt{2} \left( \cos \frac{13\pi}{4} + i \sin \frac{13\pi}{4} \right)$  in standard form, simplified.