

# Math 1613 - Trigonometry

Quiz #26 - 2011.11.17

Name: \_\_\_\_\_

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1. Give a geometric reason as to why De Moivre's Theorem is true. The identity from this theorem is given below:

$$[r(\cos(\theta) + i \sin(\theta))]^n = r^n [\cos(n\theta) + i \sin(n\theta)]$$

2. Express the complex number  $z = -3 - 3\sqrt{3}i$  in complex trigonometric form, using radian angle measure.