Stony Brook University
Mathematics Department
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MAT 220
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Quiz 1.

Name _____

1. Give definitions of the following notions and, when possible, present the notation and an expression for a complex number $z = x + iy$

(1) absolute value,

(2) conjugate complex number,

(3) module,

(4) argument,

(5) trigonometric form,

(6) multiplicative inverse

2. Write the statements of behavior under multiplication of complex numbers of their

(1) conjugates,

(2) absolute values,

(3) arguments,

(4) real parts.

3. Express the following characteristics of a complex number z using only arithmetic operations with z and $\overline{z}$:

(1) real part,

(2) imaginary part,

(3) absolute value,

(4) multiplicative inverse