

Advanced Math

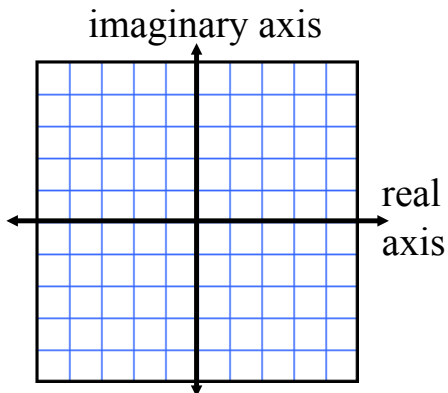
6-5

(Day 1)

DeMoivre's Theorem

Complex Number :

Complex Plane :



Absolute value of a Complex Number :

*1) Place $-2 + 3i$ in the complex plane.

*2) $|-2 + 3i| =$

Trigonometric form of a Complex Number :

$$a + bi = r(\cos\theta + i\sin\theta)$$

$r = \sqrt{a^2 + b^2}$ and is called the _____.

θ is called the _____.

*3) Write the trig form of $7 - 5i$. _____

Multiplying and Dividing Complex Numbers :

When multiplying two complex numbers, z_1 and z_2 ,

When dividing two complex numbers, z_1 and z_2 ,

$$*4) [2(\cos 30^\circ + i \sin 30^\circ)] \cdot [5(\cos 75^\circ + i \sin 75^\circ)]$$

Assignment:
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2-26 even,
46-56 even.