

Complex Numbers: Polar Format (12:49)

Describe how complex numbers are represented in polar format. Identify the angle format.

Identify how to multiply and divide complex numbers expressed in polar format.

Given the complex numbers $A = 7.9 \angle 60.5^\circ$ and $B = 10.5 \angle 27.3^\circ$ perform the operations $A \cdot B$ and A/B .

Given the complex numbers $A = 9.9 \angle 83.0^\circ$ and $B = 8.9 \angle -40.9^\circ$ perform the operations $A \cdot B$ and A/B .

Given the complex numbers $A = 11.8 \angle 134.7^\circ$ and $B = 2.7 \angle 66.3^\circ$ perform the operations $A \cdot B$ and A/B .

Given the following complex numbers perform the indicated operations:

① $\bar{A} = 6.6 \angle 74.1^\circ$	② $\bar{A} = 8.1 \angle -108.7^\circ$	③ $\bar{A} = 10.1 \angle 107.9^\circ$	④ $\bar{A} = 6.0 \angle -16.3^\circ$
$\bar{B} = 1.3 \angle 157.4^\circ$	$\bar{B} = 5.0 \angle -56.3^\circ$	$\bar{B} = 8.1 \angle -119.4^\circ$	$\bar{B} = 10.5 \angle 48.1^\circ$
$\bar{A} \cdot \bar{B} =$	$\bar{A} \cdot \bar{B} =$	$\bar{A} \cdot \bar{B} =$	$\bar{A} \cdot \bar{B} =$
$\bar{A}/\bar{B} =$	$\bar{A}/\bar{B} =$	$\bar{A}/\bar{B} =$	$\bar{A}/\bar{B} =$

Express the number 5 in polar format.

Negate the number $5 \angle 0^\circ$.

Determine the significance of complex numbers expressed in polar format with small angles.