Personal Skills 1

Multiply and divide complex numbers in polar form.

Learning outcomes Write a complex number in polar form, and solving complex problems in a polar form

Intended destination Find the product and quotient of the complex in a polar form.

Name .... Class. ....No........................

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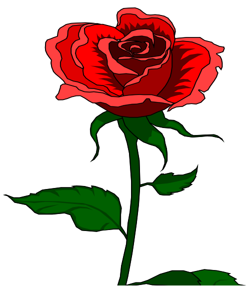
Find the product of a complex number in polar form and then write the answer in the form a + bi.

No	Problem	$r(\cos\theta^\circ + i\sin\theta^\circ)$	a+bi
1	$[3(\cos15^\circ + i\sin15^\circ)][2(\cos75^\circ + i\sin75^\circ)]$		
2	$[4(\cos70^\circ + i\sin70^\circ)][15(\cos20^\circ + i\sin20^\circ)]$		
3	$[6(\cos25^\circ + i\sin25^\circ)][3(\cos290^\circ + i\sin290^\circ)]$		
4	$[2(\cos100^\circ + i\sin100^\circ)][4(\cos50^\circ + i\sin50^\circ)]$		
5	$[9(\cos175^\circ + i\sin175^\circ)][3(\cos275^\circ + i\sin275^\circ)]$		
6	$[7(\cos130^\circ + i\sin130^\circ)][2(\cos95^\circ + i\sin95^\circ)]$		

Find the quotient of a complex number in polar form and then write the answer in the form a + bi.

No	Problem	$r(\cos\theta^\circ + i\sin\theta^\circ)$	a+bi
1	$9(\cos 313^\circ + i\sin 313^\circ) \div 3(\cos 268^\circ + i\sin 268^\circ)$		
2	$4(\cos 266^\circ + i\sin 266^\circ) \div 2(\cos 86^\circ + i\sin 86^\circ)$		
3	$21(\cos 33^\circ + i\sin 33^\circ) \div 3(\cos 93^\circ + i\sin 93^\circ)$		
4	$\frac{2(\cos 15^\circ + i\sin 15^\circ)}{4(\cos 45^\circ + i\sin 45^\circ)}$		



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Summary score

Score 10 points made .... points

Instructor. Mrs. Malaiporn uasuwan