



NOMBRE: _____ FECHA: _____

Calcule los productos:

1. $Z_1 = 2[\cos 30^\circ + i\sin 30^\circ]$ y $Z_2 = 3[\cos 30^\circ + i\sin 30^\circ]$

a. $Z_1 \cdot Z_2 = \frac{3}{2}[\cos(60^\circ) + i\sin(60^\circ)]$

b. $Z_1 \cdot Z_2 = \frac{3}{2}[i\cos(60^\circ) + \sin(60^\circ)]$

c. $Z_1 \cdot Z_2 = 6[\cos(60^\circ) + i\sin(60^\circ)]$

d. $Z_1 \cdot Z_2 = 6[i\cos(60^\circ) + \sin(60^\circ)]$

2. $Z_1 = 2[\cos 30^\circ + i\sin 30^\circ]$ y $Z_2 = 3[\cos 45^\circ + i\sin 45^\circ]$

a. $Z_1 \cdot Z_2 = \frac{3}{2}[\cos(60^\circ) + i\sin(60^\circ)]$

b. $Z_1 \cdot Z_2 = \frac{2}{3}[\cos(300^\circ) + i\sin(300^\circ)]$

c. $Z_1 \cdot Z_2 = 6[i\cos(75^\circ) + \sin(75^\circ)]$

d. $Z_1 \cdot Z_2 = 6[\cos(75^\circ) + i\sin(75^\circ)]$

3. $Z_1 = [\cos 30^\circ + i\sin 30^\circ]$ y $Z_2 = [\cos 15^\circ + i\sin 15^\circ]$

a. $Z_1 \cdot Z_2 = 1[\cos(45^\circ) + i\sin(45^\circ)]$

b. $Z_1 \cdot Z_2 = 1[\cos(90^\circ) + i\sin(90^\circ)]$

c. $Z_1 \cdot Z_2 = 1[\cos(30^\circ) + i\sin(30^\circ)]$

d. $Z_1 \cdot Z_2 = 1[\cos(75^\circ) + i\sin(75^\circ)]$

Determine los respectivos cocientes:

4. $Z_1 = [\cos 40^\circ + i\sin 40^\circ]$ y $Z_2 = [\cos 50^\circ + i\sin 50^\circ]$

a. $\frac{Z_1}{Z_2} = \frac{3}{5}[\cos(-10^\circ) + i\sin(-10^\circ)]$

b. $\frac{Z_1}{Z_2} = [\cos(-10^\circ) + i\sin(-10^\circ)]$

c. $\frac{Z_1}{Z_2} = \frac{3}{5}[i\cos(-10^\circ) + i\sin(-10^\circ)]$

d. $\frac{Z_1}{Z_2} = [i\cos(-10^\circ) + i\sin(-10^\circ)]$

5. $Z_1 = 2[\cos 60^\circ + i\sin 60^\circ]$ y $Z_2 = [\cos 45^\circ + i\sin 45^\circ]$

a. $\frac{Z_1}{Z_2} = 2[\cos(105^\circ) + i\sin(105^\circ)]$

b. $\frac{Z_1}{Z_2} = \frac{1}{2}[\cos(10^\circ) + i\sin(10^\circ)]$

c. $\frac{Z_1}{Z_2} = 2[\cos(15^\circ) + i\sin(15^\circ)]$

d. $\frac{Z_1}{Z_2} = 2[i\cos(15^\circ) + i\sin(15^\circ)]$