

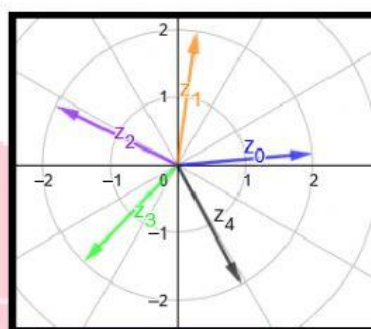
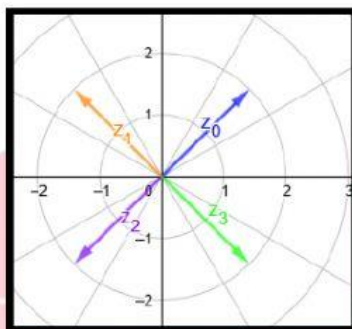
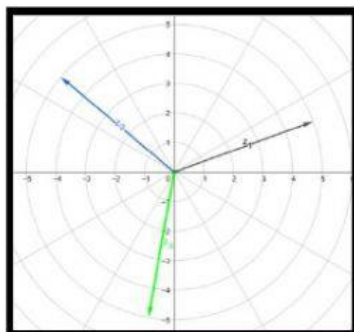
TEMA: RADICACION DE UN NUMERO COMPLEJO

APORTE: Trabajo en clases

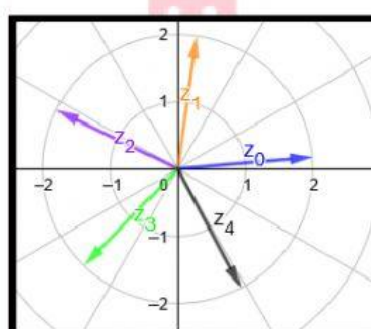
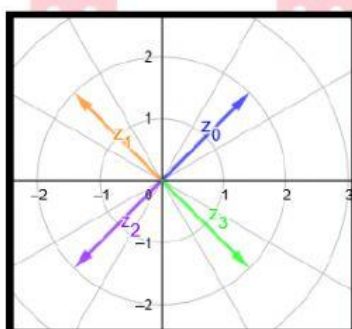
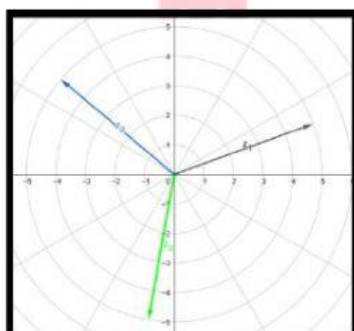
NOMBRE: _____

1. Seleccione la gráfica que represente las raíces de los siguientes números complejos:

a) $\sqrt[5]{32(\cos 50^\circ + i \sen 50^\circ)}$



b) $\sqrt[3]{125(\cos 60^\circ + i \sen 60^\circ)}$



2. Determine las raíces de los siguientes números complejos:

a) $\sqrt{64(\cos 120^\circ + i \sen 120^\circ)}$

$$Z_0 = \sqrt{64} \left(\cos \left(\frac{120 + 360 \cdot 0}{2} \right) + i \sen \left(\frac{120 + 360 \cdot 0}{2} \right) \right)$$

$Z_0 = \underline{\hspace{1cm}} (\cos \underline{\hspace{1cm}} + i \sen \underline{\hspace{1cm}})$

$$Z_1 = \sqrt{64} \left(\cos \left(\frac{120 + 360 \cdot 1}{2} \right) + i \sen \left(\frac{120 + 360 \cdot 1}{2} \right) \right)$$

$Z_1 = \underline{\hspace{1cm}} (\cos \underline{\hspace{1cm}} + i \sen \underline{\hspace{1cm}})$



$$b) \sqrt[2]{9(\cos 270^\circ + i \sen 270^\circ)}$$

$$Z_0 = \sqrt{9} \left(\cos \left(\frac{270 + 360 * 0}{2} \right) + i \sen \left(\frac{270 + 360 * 0}{2} \right) \right)$$

$$Z_0 = \text{---} (\cos \text{---} + i \sen \text{---})$$

$$Z_1 = \sqrt{9} \left(\cos \left(\frac{270 + 360 * 0}{2} \right) + i \sen \left(\frac{270 + 360 * 0}{2} \right) \right)$$

$$Z_1 = \text{---} (\cos \text{---} + i \sen \text{---})$$

