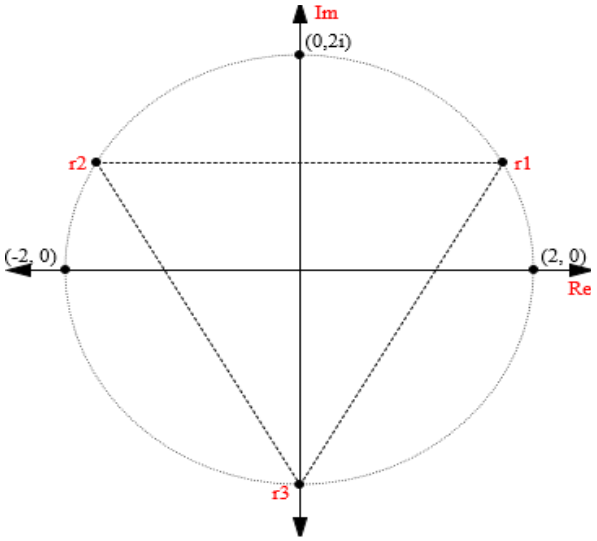
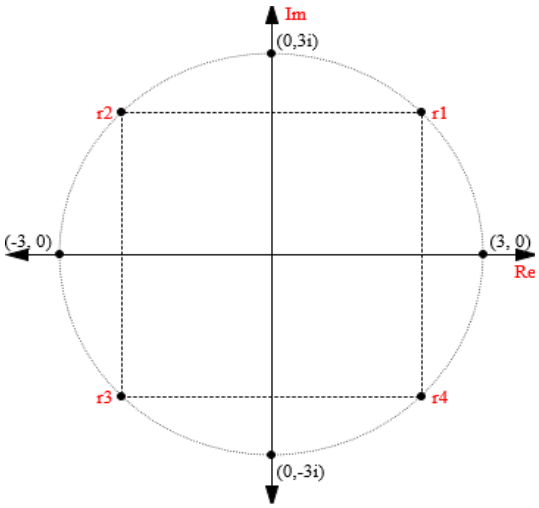
Roots of a Complex Number Name _____

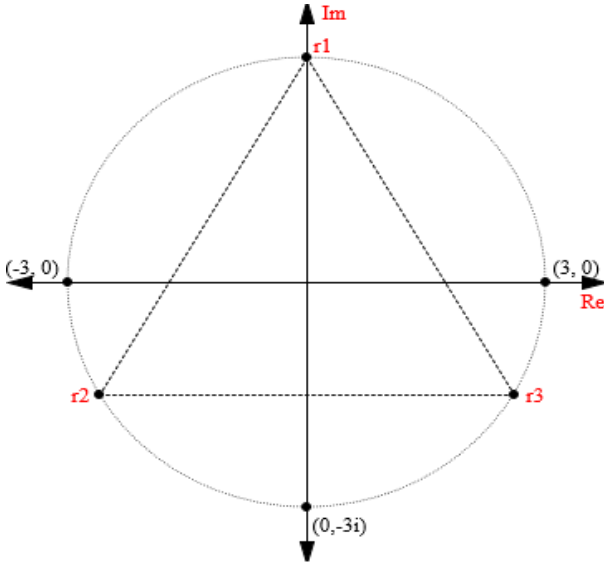
1. The graph of the three complex roots of the equation $z^3 = 8i$ are shown below. Express these roots in polar and standard a + bi format.



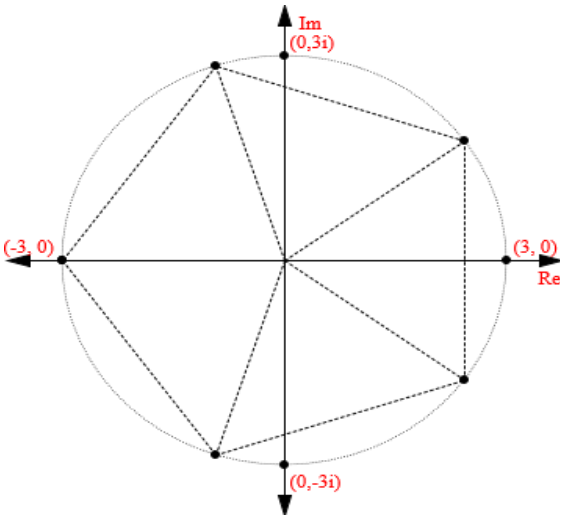
2. The graph of the four complex roots of the equation $z^4 = -81$ are shown below. Express these roots in polar and standard a + bi format.



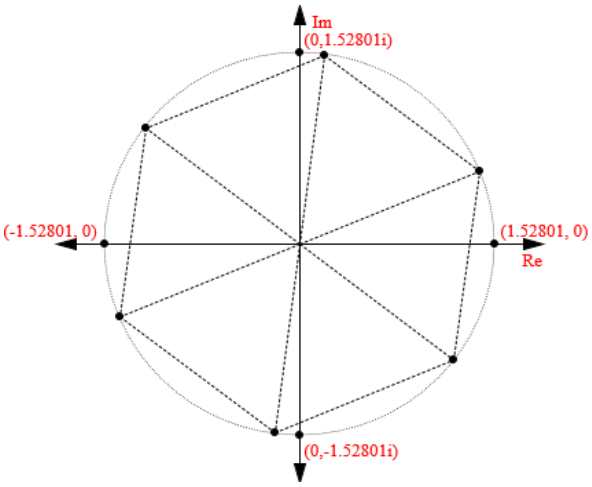
3. The graph of the three complex roots of the equation $z^3 = -27i$ are shown below. Express these roots in polar and standard a + bi format.



4. The graph of the five complex roots of the equation $z^5 = -243$ are shown below. Express these roots in polar and standard a + bi format.



5. The graph of the six complex roots of the equation $z^6 = -9 + 9i$ are shown below. Express these roots in polar and standard a + bi format.



6. The graph of the ten complex roots of the equation $z^{10} = -1{,}024$ are shown below. Express these roots in polar and standard a + bi format.