Each small group is assigned a spherical harmonic from the list below:

1. Y_1^1
2. Y_1^0
3. Y_1^{-1}
4. Y_2^1
5. Y_2^0
6. Y_2^{-1}
7. Y_3^1
8. Y_3^0
9. Y_3^{-2}

Using a tiny Argand diagram, represent the value of the spherical harmonic at:

- at the equator ($\theta = \pi/2$) for $\phi = 0, \frac{\pi}{4}, \frac{\pi}{2}, \frac{3\pi}{4}, \pi, \frac{5\pi}{4}, \frac{3\pi}{2}, \frac{7\pi}{4}$
- repeat for $\theta = \frac{\pi}{6}, \frac{\pi}{3}, \frac{2\pi}{3}, \frac{5\pi}{4}$

Tip: Make reference marks in black and draw the complex value of the spherical harmonic in a different color.