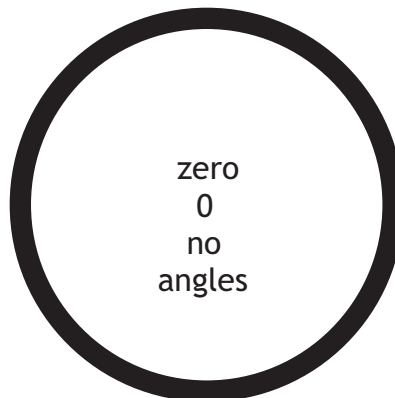The origin of our modern numbers is rooted in the Arabic symbols which represented the value by the number of angles in the symbol.

zero
0
no
angles

To distinguish between the number 0 and the letter O, often one of them is written with a slash through it, either completely $\emptyset$ or partially $\emptyset$.

Whether the number or the letter has the slash, depends on the specific usage standard for the current document.