Let's revisit some examples!

- $A = \mathbb{Z}$ and $x \sim y \iff y - x$ is even.
- Then $[0] =$ the even numbers, and $[1] =$ the odd numbers.
- But also notice that

$$[0] = [2] = [4] = [-6] = \ldots [1] \qquad = [3] = [5] = [-61] = \ldots$$

- Then

$$\mathbb{Z}/\sim = \{\text{evens}, \text{odds}\}.$$