GEOMETRIC TRANSFORMATIONS

A TYPES OF TRANSFORMATIONS

Transformations are ways to move, flip, or turn a shape.
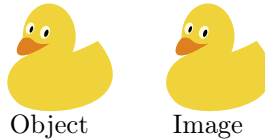
> **Definition Object and Image**
>
> When a transformation is applied to a shape, the original shape is called the **object**. The resulting shape after the transformation is called the **image**.
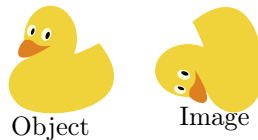
> **Definition Types of Transformations**
>
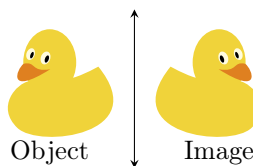> There are several types of transformations, including:
>
> - **Translation:** Moves the shape to a new position without changing its shape, size, or orientation.
>
>   Object   Image
>
> - **Rotation:** Turns the shape.
>
>   Object   Image
>
> - **Reflection:** Flips the shape.
>
>   Object   Image

B PATTERNS

> **Definition Pattern**
>
> A **pattern** is created by repeating a transformation (such as translation or rotation) to form a design.

Ex: The following pattern is created by repeating a translation: