# **TRANSFORMATIONS**

## A TYPES OF TRANSFORMATIONS

Transformations are ways to move, flip, or turn a shape.

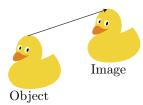
#### Definition Object and Image -

When a transformation is applied to a shape, the input shape is called the **object**. The output shape after the transformation is called the **image**.

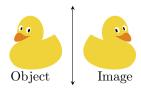
#### Definition Types of Transformations

There are several types of transformations, including:

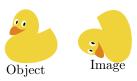
• Translation: Slides the shape to a new position without changing its shape, size, or the direction it faces.



• Reflection: Flips the shape over a line (like a mirror), creating a mirror image.



• Rotation: Turns the shape.



### **B PATTERNS**

Definition Pattern

A pattern is created by repeating a transformation (e.g., translation, reflection, rotation) to form a design.

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

