



0/1

# MATHEMATICS

---

Introduction To Geometry



# WHAT IS GEOMETRY?

---

Geometry is a branch of mathematics that focuses on the study of

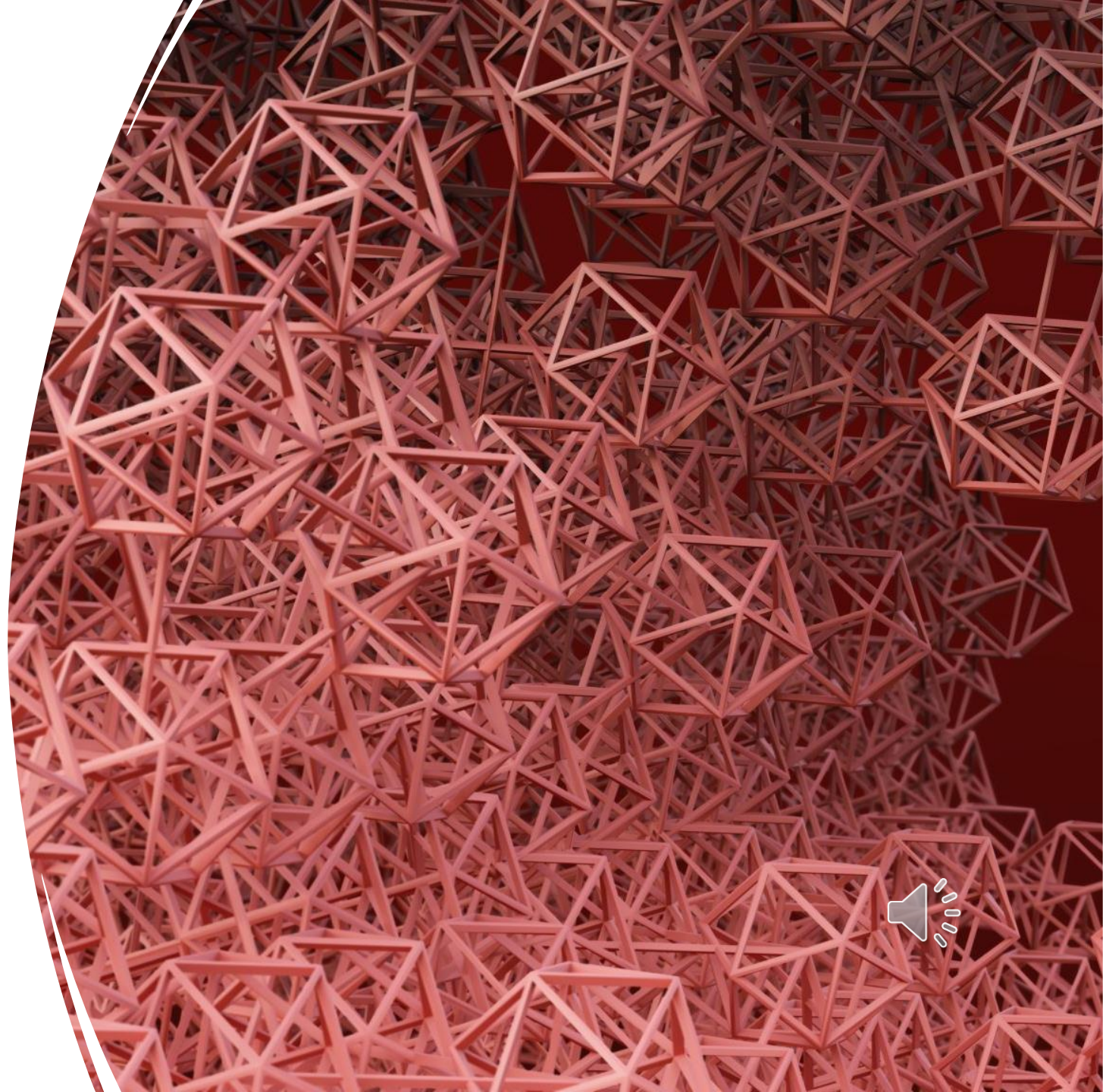
shapes

sizes

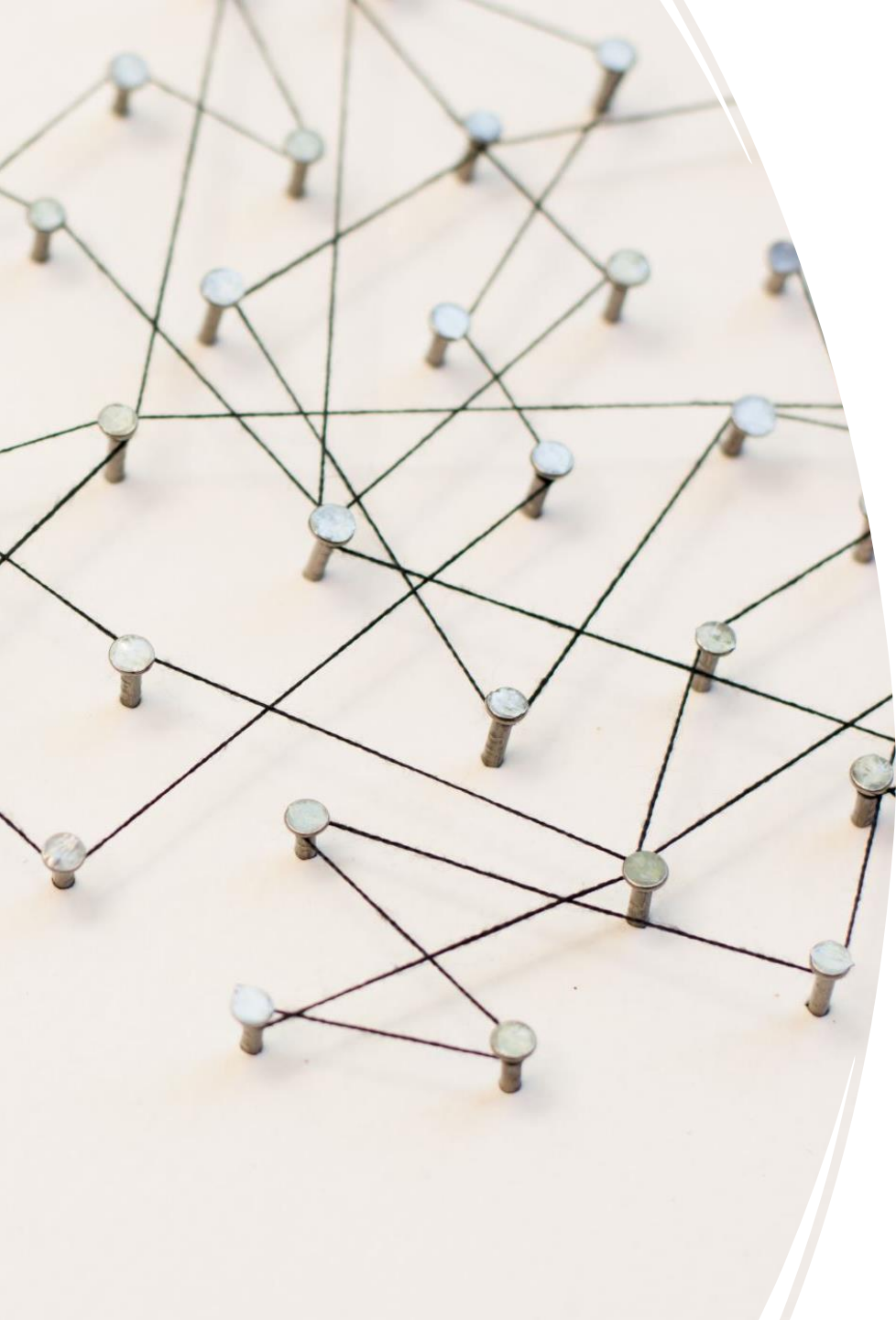
properties of space

relationships between different objects  
in space.

The field of geometry involves both theoretical and practical aspects, providing a framework for understanding spatial relationships and structures.







# BASIC DEFINITIONS IN GEOMETRY

---

## POINTS, LINES, AND PLANES

**Points** are fundamental entities with no size or dimension

**Lines** are straight paths that extend infinitely in both directions

**Planes** are flat surfaces that extend infinitely



# Angles

---

*Angles are formed when two rays share a common endpoint.*

*They are measured in degrees or radians*

*Those are fundamental to understanding geometric relationships*



# POLYGONS

---

*Polygons are closed plane figures with straight sides.*

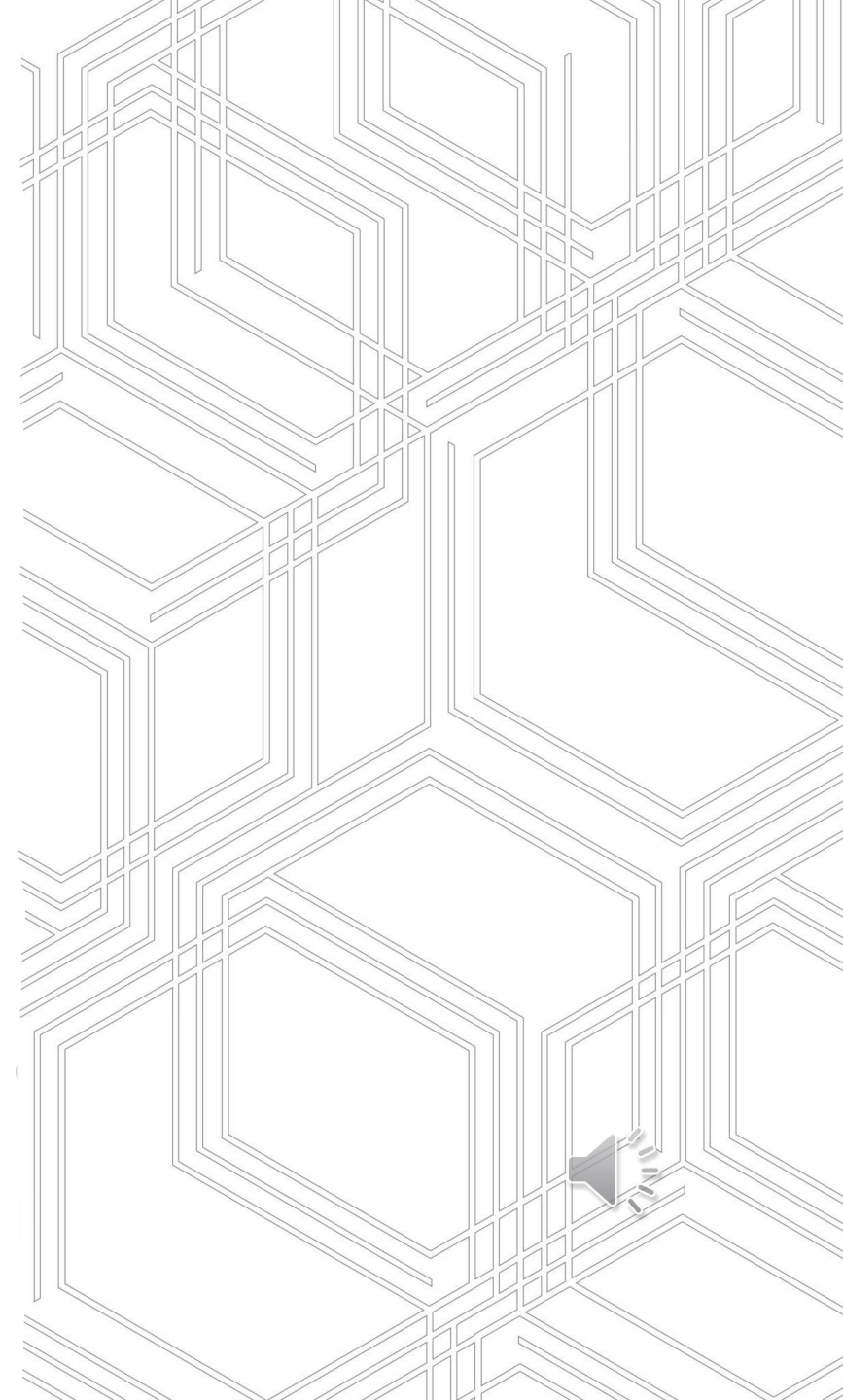
*Common examples include*

*Triangles*


*Rectangles*

*Pentagons*

*Hexagons*



# CIRCLES



---

Circles are a special type of curve where all points are having equal distance from a central point.

Circles and their properties are very important in geometric concepts.





Symmetry refers to the balanced arrangement of parts of a geometric object.



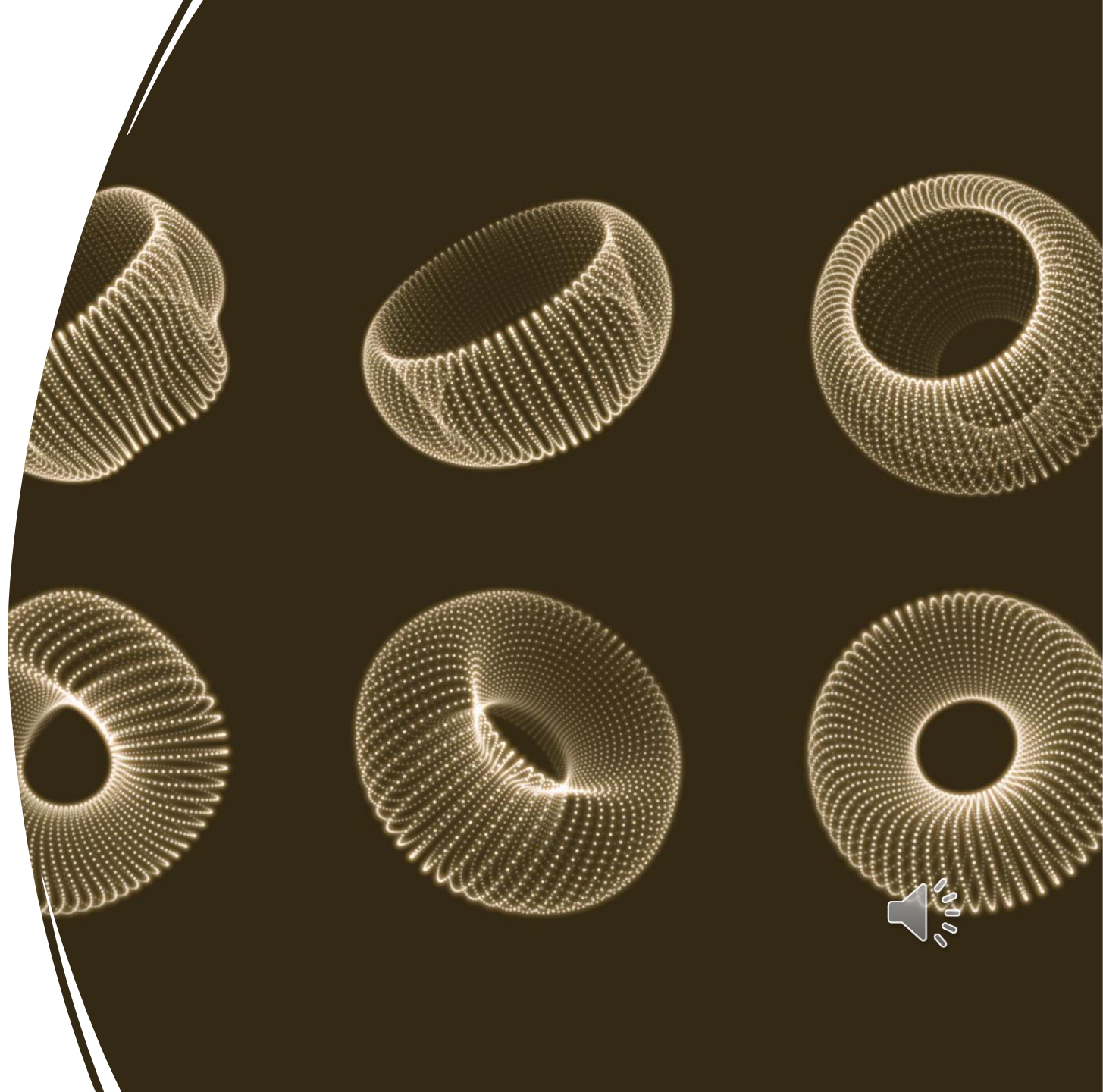


# TRANSFORMATIONS

---

*Transformations involve moving, rotating, reflecting, or resizing geometric shapes.*

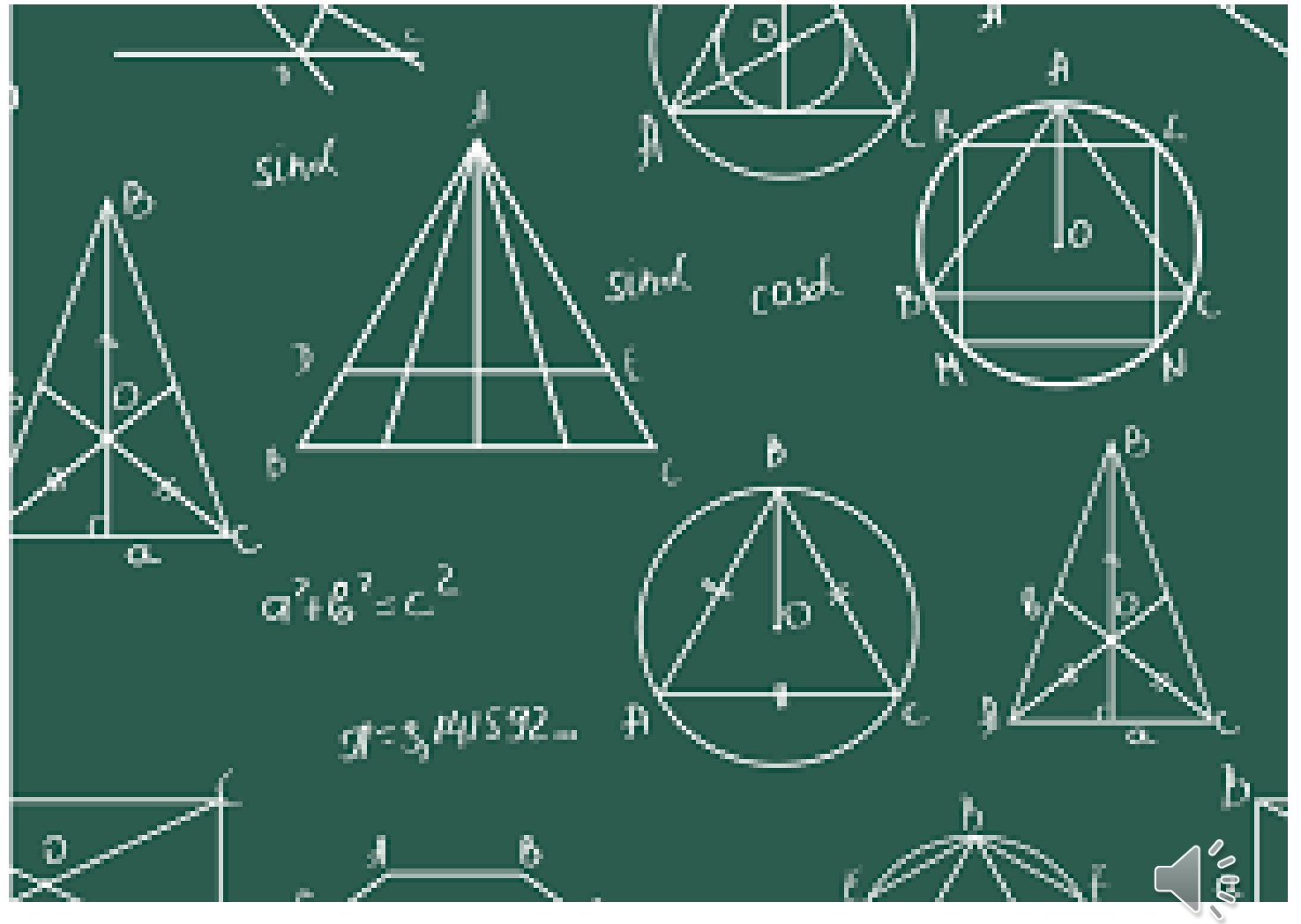
*They help study how objects change in space.*





# TRIGONOMETRY

*The significant branch of mathematics that deals with the relationships between the angles and sides of triangles, often applied in geometry.*



# COVERED POINTS

---

- Introduction To Geometry
- Basic Definitions in Geometry
  - Points, Lines, and Planes
  - Angles
  - Polygons
  - Circles
  - Symmetry and the Transformation
  - Trigonometry



**AIS Learning**  
E m p o w e r e d  
y o u r f u t u r e

