

Tom Rocks Maths: Essay Competition

Euclid's Geometry

- **Who was Euclid?**

Euclid was a Greek mathematician known as the “**Father of Geometry.**”

He wrote a famous book called Elements, where he explained geometry using axioms.

- **What are Axioms?**

- **Axioms** are basic truths that:

- Do not need proof
- Are accepted as true everywhere

Euclid's Axioms (List with Explanation)

1. Things equal to the same thing are equal to one another

If:

- $A = B$
- $B = C$

Then:

- $A = C$

2. If equals are added to equals, the wholes are equal

Example:

- If $A = B$
- Then $A + C = B + C$

3. If equals are subtracted from equals, the remainders are equal

Example:

- If $A = B$

- Then $A - C = B - C$

4. Things which coincide with one another are equal

If two shapes match exactly, they are equal

Example: Two identical triangles

5. The whole is greater than the part

A full object is always bigger than a part of it

Example: A full pizza > one slice

6. Things which are double of the same things are equal If:

- $A = B$
Then:
- $2A = 2B$

7. Things which are halves of the same things are equal

If:

- $A = B$
Then:
- $A/2 = B/2$

• Why are Euclid's Axioms Important?

- They are the **foundation of geometry**
- Used to prove theorems
- Help in logical thinking

I have explained Euclid's geometry because it is also known universal truths which everyone should be aware of, it is also a chapter in our

class 9 CBSE textbook. Have a nice understanding and enjoy these math truths in your day to day life!

Thank You