Glossary for Mathematics

Radian

A radian is a unit of angular measure used in mathematics, particularly in trigonometry and calculus. It's based on the radius of a circle. One radian is the angle created when the length of an arc on a circle is equal to the circle's radius.

Key Facts about Radians

- In a full circle (360 degrees), there are (2\pi) radians.
- Therefore, 1 radian ≈ 57.3 degrees.
- Radians are often used in mathematical functions and calculus because they simplify many formulas, especially in trigonometry, where angles measured in radians lead to cleaner equations.

Formula to Convert Between Radians and Degrees

To convert degrees to radians: [\text{Radians} = \text{Degrees} \times \frac{\pi}{180}]

To convert radians to degrees: [\text{Degrees} = \text{Radians} \times \frac{180}{\pi}]

Radians are commonly used in physics, engineering, and computer science, particularly in fields that involve rotation or oscillation.

Term 2

Definition of term 2.

Term 3

Definition of term 3.