

Parent Guide to the

# Trigonometric Ratios in Right Triangles

## Today's Standard

HSG.SRT.C6 - Understand that by similarity, side ratios in right triangles are properties of the angles in the triangle, leading to definitions of trigonometric ratios for acute angles.

## Real-World Applications for this Standard

Calculating heights of tall objects using trigonometry; Determining distances in navigation and surveying; Analyzing slopes and angles in architecture and construction

### Today I Learned

Today, we learned about how the sides of right triangles relate to their angles. This helps us understand trigonometry, which is used in many real-world situations.

### **Common Stumbling Blocks**

Sometimes, students think that trigonometric ratios only work for specific triangles, but they actually work for all similar triangles. They might also mix up which sides to use for sine, cosine, and tangent. We can help them by practicing and using clear examples.

#### Quiz Me

- What is a right triangle?
- What is a ratio?
- What is the sine of an angle?
- What is the cosine of an angle?
- What is the tangent of an angle?

#### Help Me

Trigonometric ratios help us solve problems like finding the height of a building or the distance across a river. By understanding these ratios, we can use them in many practical ways.