



Sine and Cosine Relationships

Today's Standard

HSG.SRT.C7 - Explain and use the relationship between the sine and cosine of complementary angles.

Real-World Applications for this Standard

Calculating heights of buildings using trigonometric ratios; Designing ramps and slopes in architecture; Navigating using triangulation in GPS technology; Analyzing sound waves in physics; Creating animations in computer graphics

Today I Learned

Today, we learned about how the sine and cosine of two angles that add up to 90 degrees are related.

Common Stumbling Blocks

Some students might think that the sine and cosine of these angles are not related. Others might mix up angles that add up to 90 degrees with those that add up to 180 degrees.

Quiz Me

- What do complementary angles add up to?
- What is the sine of an angle?
- What is the cosine of an angle?
- How are sine and cosine of complementary angles related?
- Can you give an example of complementary angles?

Help Me

When you look at angles that add up to 90 degrees, the sine of one angle is the same as the cosine of the other. This helps in many real-world situations like measuring heights and distances.