



Modeling Periodic Phenomena

Today's Standard

HSF.TF.B5 - Choose trigonometric functions to model periodic phenomena with specified amplitude, frequency, and midline.*

Real-World Applications for this Standard

Predicting tidal patterns; Modeling sound waves; Analyzing seasonal weather patterns; Designing signal processing algorithms

Today I Learned

Today, we learned how to use math to describe things that happen over and over, like the waves in the ocean or the sound of music. We use something called trigonometric functions to do this.

Common Stumbling Blocks

Sometimes, kids mix up how tall the wave is with how often it happens. Also, they might think moving the middle line changes how tall or often the wave is, but it doesn't.

Quiz Me

- What is a wave?
- What is amplitude?
- What is frequency?
- What is a midline?
- Can waves be used to show music?

Help Me

We use math to describe things that repeat, like waves or music. By knowing how tall the wave is, how often it happens, and where the middle is, we can understand and predict these patterns better.