

Tooele County Lesson Plan Template

Class: Secondary Math 2

Standard: G.SRT.6 - 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.

What do I want my students to learn and be able to do? Learning Objective in Student Friendly Language (Post in class for students to see.)

Discover trigonometric ratios in right triangles

Tier 1 Instruction - Step by Step Procedure

10 minutes	Practice Quizette - Proportions Day 3
5 minutes	Homework Q&A
2 minutes	Trigonometry root words - not so scary!
2 minutes	Ratio and Proportion meaning
5 minutes	Pass out and trace 30 60 90 triangles (encourage different orientations)
3 minutes	Pass out and measure side lengths of given triangle and traced triangle
3 minutes	Discuss vocabulary: angle of reference, hypotenuse, opposite, adjacent
2 minutes	Label triangles with appropriate vocabulary using the 60 degree angle as the angle of reference.
5 minutes	Create the ratios: opposite/hypotenuse, adjacent/hypotenuse, opposite/adjacent
3 minutes	Partner Share: compare ratios. Why does this happen (students should conclude triangle are similar by AA similarity)
3 minutes	Label sides of given triangles, set up ratios.
2 minutes	Partner share: compare ratios, why does this happen? Conclusion!
5 minutes	Name the ratios with mnemonic device: soh-cah-toa
10 minutes	Practice labelling and finding ratios. Quick Poll
5 -10 minutes	Homework!

Key Vocabulary: Hypotenuse - across from right angle
 Trigonometry - measuring triangles Sine - opposite/hypotenuse Adjacent - next to
 Ratio - relationship between two quantities Cosine - adjacent/hypotenuse Opposite - across from
 Proportion - relationship between 2 quantities Tangent - opposite/adjacent Reference Angle

Considerations for Special Populations:

*mnemonic device for remembering trig ratios
 *emphasis on written vocabulary

What will I do if they don't learn it? (Tier 2 & 3 interventions)

*Individual instruction
 *Reciprocal Teaching

What explicit teaching strategies need to be emphasized?

* Partner sharing (think, pair, share)

What will I do if they already know it? (What additional challenges will I assign?)

*Solve for side lengths by setting up proportions of missing sides.

How will you know that they learned the material?

6.1 quiz
 6.1 Homework
 quick poll

Resources/Materials Needed:

rulers
 30 60 90 triangle templates
 6.1 task, 6.1 homework

Reflect on how the lesson was received by the students: