

Right Triangle Trigonometry Word Problem

Standards

Content

Students will be able to...

- Identify and explain triangles and their properties
- Apply mathematical knowledge to real world situations
- Apply mathematical knowledge to solve problems

Process

Students will be able to...

- Work cooperatively with peers
- Evaluate their work and make corrections when necessary
- Demonstrate effective informal communication skills
- Demonstrate effective presentation skills

Task Description and Criteria

You work for a publisher who writes Geometry text books. The publisher has asked each team to help him write an effective triangle trigonometry word problem that high school students would enjoy solving.

Working in a team of 4, you will construct your own right triangle trigonometry word problem. It must be based on a situation you feel would be interesting to a high school student in the real world. The problem must be written out and solved on notebook paper. Remember, since it is a real world problem, the solution has to be logical.

You will be presenting your problem to the class using a large poster board. The poster board must include the word problem and a diagram to help visualize the problem. On the back of the poster board, you must attach your solution so that you can refer to it at the end of your presentation. Make sure that the poster is written out clearly and legibly, so that everyone in the room will be able to see it.

You will present your problem in front of the class for them to solve and evaluate. Share your solution with the class when everyone is done. Each team member will receive the same grade, so make sure that everyone on your team is contributing an equal effort!

You will be evaluating other team's presentations with this form. Check the appropriate box and total their score.

Your Name:			
Team Being Evaluated:			
Criteria	Bad- 1	Ok- 2	Great- 3
Word Problem			
Poster			
Presentation			
Total Score			

Your grade will be based on the following criteria:

- ❖ Word problem written creatively for right triangle trigonometry
- ❖ Word problem must be logical for the real world
- ❖ Your solution must be accurate and all work must be shown
- ❖ Your poster board must be neat and include problem and diagram
- ❖ You must present your problem to the class
- ❖ You must work as a team and contribute an equal effort
- ❖ You must evaluate other teams presentations

Rubric

Criteria	Unacceptable (0 pts)	Poor (2 pts)	Fair (4 pts)	Good (6 pts)
Word Problem	No word problem written	Word problem not very creative for right triangle trigonometry	Word problem somewhat creative for right triangle trigonometry	Word problem very creative for right triangle trigonometry
Real World Application	Not logical for the real world			Logical to the real world
Solution	Incorrect Solution or no work shown	Incorrect Solution, but some steps are shown	Correct Solution, but steps are not all shown	Correct Solution with all work shown
Poster	No poster board created	Poster has only the problem written with no diagram	Poster has problem and diagram written, but not very neatly	Poster has neatly and colorfully written problem and diagram
Presentation	No presentation given	Poor presentation of problem	Presented problem well	Presented problem very professionally
Team Work	No team work, only one person did all the work	Worked ok as a team, some members worked more than others	Worked very well as a team, equal efforts from each person	
Evaluation of other teams	Not all teams were evaluated by members	Some teams were evaluated by members	All teams were evaluated by members	

Total: / 38 points