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Calculating Slopes

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Name: Dave Iacchetta
Grade level(s)/Subject taught: Algebra A, 9 th grade
Objectives: To teach students the importance of slope in the real world and how it is calculated and utilized in the real world (i.e. ski slopes, soap box derby locations, residential / commercial / agricultural development. This could also extend into inequalities. For example slopes $ m > .25$ and slopes $ m < 1.95$ are ideal for ski resorts. Slopes $ m > .1$ and < 1 are ideal for skateboarding. Slopes $ m > .45$ and < 1.2 are ideal for the X-games.

Please provide a rich **one-page, single-spaced**, description or a *vision* of your best thinking on a way or ways you might teach the planned lesson. (approximately ½ page for the teacher role, ½ page for the student role). Also, construct a tentative rubric that you might use with your students (see example)

Items to include in your lesson plan: (Choose your discipline/concepts from your own area).

1. Write the Mathematical Concept or “key idea” that modeling will be used to teach: (e.g. Students use mathematical modeling/ multiple representation to provide a means of presenting, interpreting, communicating, and connecting mathematical information and relationships)

Calculations and Computations Modeling and multiple representations Real World applications

and/or...

RUBRIC

3pts- students will be able to collect and navigate GIS data and make predictions or suggestions as to best locations for skiing/boarding/etc.

2pts- students will be able to collect some data and navigate GIS data and make some predictions or suggestions as to best locations for skiing/boarding/etc.

1pts- students collect and navigate little GIS data and make no predictions or suggestions as to best locations for skiing/boarding/etc.

0pts- students unable to collect or navigate GIS data, unable to make predictions or suggestions as to best locations for skiing/boarding/etc.

