

Chapter 3 – Parallel and Perpendicular Lines

Chapter 3:

- Compare the differences between parallel and perpendicular lines.
- Design and solve a problem dealing with parallel lines with a transversal.
- Using real world models describe how you find the slope of a line.

Standard 3.1

Compare the differences between parallel and perpendicular lines.

Task: Create two real world models depicting the difference between parallel and perpendicular lines. (Make sure one model is for parallel lines and one is for perpendicular lines. Also, make sure to explain in your own words the differences as well.)

Rubric

	0	1	2	3
Model 1 Parallel	Did not create a model	Model was created with haste, little effort was given OR no tie to the real world	Model was created, some effort was given AND a small relevance to the real world	Model is created with great effort AND a good tie to the real world
Model 2 Perpendicular	Did not create a model	Model was created with haste, little effort was given OR no tie to the real world	Model was created, some effort was given AND a small relevance to the real world	Model is created with great effort AND a good tie to the real world
Explanation	Did not explain the models	Only explained one model	Explained both models	Explained both models with a good analysis of the differences

Standard 3.2

Design and solve a problem dealing with parallel lines with a transversal.

Task: Create a real world problem involving a set of parallel lines with a transversal cutting them and solve it. Make sure to have a good description of the problem.

Rubric

	0	1	2	3
Created problem	Did not create a problem	Problem was missing either parallel lines or a Transversal	Problem was too easy, or too hard but included all of the pieces	Problem was a well constructed moderate problem with all of the required pieces.
Solution	Solution was Incorrect			Solution was correct
Description	No description was given for the problem	Description was given but was not a real world.	Description was given but did not state enough information to solve	Description was both well written with good information AND real world

Standard 3.3

Using real world models describe how you find the slope of a line.

Task: Create a set of stairs and present on how builders find the slope of it.

Rubric

	0	1	2	3
Creation of the stairs	No model was made	Model was made but created very sloppy, no constant slope	Model was made with moderate effort, slope differed a bit	Model was made with good effort and stairs had a constant rate of change
Explanation of how builders find the slope	No explanation on how to find slope	Explanation was given but it had little to do with how builders find the slope	Explanation was knowledgeable and slope was found but there was little information on how builders find it.	Explanation was perfect! Good description on how to find slope and how builders find slope.
Presentation	No Presentation	Presentation had little to do with the model and builders	Presentation was ok but missing information on how builders find the slope	Presentation was very good and informative on how builders find the slope