

Exponential Properties Project

General Information

Course: Math Academy 1

Chapter: one

Assigned: Friday, September 18

Due: Friday, September 25

Group Size: 1 or 2 people

Format: slide deck

Summary: Using formal, typed mathematical notation, explain the properties of exponents.

Bonus: Explain what a logarithm is, and use this explanation to show the relationship between the product of powers property and the product property of logarithms.

Directions

1. Make a slide for each of the seven properties of exponents discussed in class. Include the property itself, the name of the property, and a clear example that is not from the notes or book.
2. On a separate slide, make up an expression that can be simplified using five or more of the properties, and simplify it. Label every step with the name of the property involved.

Scoring

[A] Content: ____ / 20

- 2 The criterion is clearly met.
1 The criterion is addressed to a meaningful but limited extent.
0 The criterion is not addressed in a meaningful way.

1 2

- The properties are correctly identified.
 The properties are mathematically correct.
 The example is not very similar to an example that was provided in class or in the book.
 Five or more different properties are correctly identified in the example.
 The example is simplified correctly.
 The example is simplified completely.
 The example is easy to follow.
 Variables are italicized.
 Numbers and symbols are not italicized.
 Mathematical notation is appropriately portrayed, including fractions and superscripts.

[B] Presentation: ____ / 10

- 3 The project is impressive in this aspect, and it appears carefully planned and created.
2 The project is reasonable in this aspect.
1 The project looks like it was done in a hurry in this aspect.
0 The project is difficult to follow because of this aspect.

1 2 3

- The slides are attractive.
 The slides have a clean and consistent style.
 The slides use color effectively.
 Everyone's name is on the project.

[C] Bonus: ____ / 0

- +5% This aspect is true to a meaningful but limited extent.
+10% Your work is exemplary in this aspect.

5 10

- You show an understanding of the concepts explored.
 The goal has been achieved.
 The final product is impressive.