Hind Ali

* Mathematical Topic: Algebra 2, logarithm properties
* General Purpose: Get students thinking about logarithmic properties.
* Overview: review the properties of logarithm
* Learning Objective/Common Core State Standard:

CCSS.MATH.CONTENT.HSF.BF.B.5: (+) Understand the inverse relationship between exponents and logarithms and use this relationship to solve problems involving logarithms and exponents.

* Grade level(s): 9, 10, 11
* Background knowledge required of students:

Students know the definition of a logarithm and properties of exponents.

* Time: 10 minutes
* Materials needed:

Posters, Calculator, pencils, and hard copies of the Logarithmic Properties

* Type of activity:
* Why I picked this activity: to enable students to calculate the:
* Product property of logarithms
* Quotient property of logarithms
* Power property of logarithms
* Follow-up activities/extensions:
* Write exponents in logarithmic form.
* Write logarithms in exponent form.
* Weaknesses/limitations of activity: no weaknesses
* Procedure:

Students can start at any of the posters and find the equivalent form of the logarithmic expression. If students are not sure, they can use calculators or plug in values to see what is equivalent. Look around at the bottom of the other posters to find the equivalent form. Move on to the next poster and repeat the process. Students should go to every poster exactly once and should end up where they started. It is really important that they keep a record of the equivalent expressions so they can reference them later. They should also write down the order of the posters they went to so that they can verify that their answers are correct.

* Source:

<https://betterlesson.com/lesson/513620/logarithmic-properties>