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| **QuestionPack - Math Basic** |
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| **1/13/2008** |
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# Basics

## signs for Multiplication and DIVISION

The following rules are observed during multiplication and division.

* Multiplying (or dividing) two numbers with opposite signs will result in negative number. (e.g.) 2 X -3= -6.
* Multiplying (or dividing) of two numbers with same signs will result in a positive number. (e.g.) -2 X -3 = 6.

# Logarithm

Logarithm of a value is the power, such that when base is raised to power it equals the value.

In the above b is called the base. (e.g.)

Note

* Base cannot be 0 or 1
* , this is because anything raised to zero is one.
* If the base is omitted it usually means 10.

## Logarithm multiplication

Proof

## Logarithm Division

Similarly it can be shown

## Logarithm POWER

## Logarithm CHANGE oF BASES

Proof

Take on both sides.