

## Mathematical - Physical

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### MATHEMATICAL

**intellectual, imagined, abstract, created**

"impossible to manifest perfectly: physically"

examples....point, line, square, circle, cube, Cartesean coordinate system

Used to represent some actual physical reality, whereby, every number is not just a number, but also represents some, as yet to be defined, value or quantity. The number 2 is always mathematically exactly twice the "unexpressed" value or quantity of the number 1, no matter what initial evaluation is given to the number 1. For example, what is two times 1, mathematically the answer is 2. - no problem.

### MATHEMATICAL - PHYSICAL

Now, what if you multiple one apple by 2? Mathematically the answer is 2 apples. However, could 2 crisp, ripe, succulent, right off the tree, picked at the right time of the season, worm-less, Cortland apples that I now hold in my hand, ever be equal to, 2 nearly identical to one another, post-season, wormy, partially squashed, insecticide sprayed, sour crab apples, that you must wait until tomorrow to possibly receive...for example?

Physically there is a problem with apple equality. This mathematical technique works great for just numbers... their inter-relationship is based upon the continuity of evaluation... all intervals between 0, 1, 2, 3, etc. being exactly equivalent.

When numbers are applied to any physical reality, this continuity needs to be in place in order that the numbers reflect an underlying reality.

### PHYSICAL

**real, tangible, manifested, exists**

examples....neutrino, photons, quarks, mesons, leptons, sub-atomic particles, protons, atoms, anti-matter

Present in only one of two forms:

1 that which inherently possesses substance/mass...indestructible unit/equal spheres

2 "empty space" ....that which does not inherently possess substance; those physical locations of the mathematical point designations.