

representations with rectangular coordinate systems

Any arbitrarily-enumerated x and y axes under a given binary operation will yield values (c) outside themselves across the x y axes plane which are relatively self-consistent within the rectangular coordinate system. Furthermore, there should be no discrepancies between the values along the x and y axes (a & b) and the values along an identical line representing sums (c), products (c) or powers (c) for that indicated interaction of x axis and y axis values (a & b) under the corresponding binary operation. In other words, every single point along these two identical lines must match exactly at one unique value. To otherwise have an irreconcilable situation in which two different values must exist for a single point is a mathematical self-contradiction which is unallowable.

This crisis occurs in most conventional binary operations- namely, subtraction (conventional), conventional multiplication, division (conventional), conventional involution and evolution (conventional). By contrast, no such crisis ever occurs in any revised binary operations because every point along the x axis and y or y_{\pm} axis/axes are in their only, correct geometrical and numerical inter-relations within the rectangular coordinate system whereby their original values (a & b or b_{\pm}) are restated (c) by the identity elements of the appropriate revised binary operation.

With every conventional binary operation, the rectangular coordinate system is used in the same manner. The x axis and y axis are ordinary real number lines which intersect perpendicularly forming an origin at (0, 0).

In subtraction (conventional):

Every point on both identical lines, the y axis (b) and the differences line (c) where the x axis (a) equals "zero", have corresponding values which are comparatively opposite for every case except zero.

In conventional multiplication:

Every point on both identical lines, the x axis (a) and the conventional products line (c) where the y axis (b) equals "zero", have corresponding values of the set of real numbers and zero, respectively. Clearly, these values are different for every case except where "a = 0".

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In division (conventional):

Every point on both identical lines, the x axis (a) and the quotients line (c) where the y axis (b) equals "zero", have corresponding values of the set of real numbers and zero, respectively. Clearly, these values are different for every case except where $a = 0$.

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In conventional involution:

Every point on both identical lines, the x axis (a) and the conventional powers line (c) where the y axis (b) equals "zero", have corresponding values of the set of real numbers and "+1", respectively. Clearly, these values are different for every case except where $a = +1$.

Every point on both identical lines, the y axis (b) and the conventional powers line (c) where the x axis (a) equals "zero", have corresponding values of the set of real numbers and zero, respectively. Clearly, these values are different for every case except where $b = 0$.

In evolution (conventional):

Every point on both identical lines, the x axis (a) and the roots line (c) where the y axis (b) equals "zero", have corresponding values of the set of real numbers and "+1", respectively. Clearly, these values are different for every case except where $a = +1$.

Every point on both identical lines, the y axis (b) and the roots line (c) where the x axis (a) equals "zero", have corresponding values of the set of real numbers and zero, respectively. Clearly, these values are different for every case except where $b = 0$.
