Abstract Submitted
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The Fractional-Linear Function in the Hyperbolic Law ALBERT KHAZAN — The maintenance of any element in a chemical compound decreases with increase of the molecular weight under the equipotential hyperbolic law Y=K/X (1). However the size (1-Y) increases according to the equation 1-Y=K/X or Y = (X-K)/X (2). This function refers to as fractional-linear one, and after transformations turns to the equation of an equipotential hyperbola whose center is displaced from the beginning of the coordinates about (0; 0) in a point with (0; 1). Hence, the valid axis on which there tops of new hyperboles are, pass perpendicularly to the axes of the equation (1). We shall enter names for hyperboles: (1) - "straight one," (2) - "adjacent one." Their directions are mutually opposite in the point Y=0.5 of crossing of each pair; this line is an axis of symmetry for all the hyperboles; the abscissa is equal to the double nuclear weight of any element (2K). Coordinates of other crossing points of the hyperboles have following parameters: X = (K1+K2), Y1 = [K1/(K1+K2)], Y2 = [K2/(K1+K2)]. At the last element the curves designate the borders of the existence of possible chemical compounds (Progr. Phys., 2007, 1, 38; 2, 83; 2, 104; 2008, 3, 56).

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