

REMARKS ON GENERALIZED SERIES ON TIME SCALES

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A short introduction to time scale calculus with examples of Delta-derivatives and integrals will be presented. Then will be introduced the notion of generalized polynomials and Taylor's formula on time scales. Next polynomial series on a time scales will be defined and some operations on them will be described. As an particular example will be shown the Taylor's series of the graininess functions on the scale of harmonic numbers. The main part will be connected with the problem of the multiplication rule of generalized polynomials where the formula for the multiplication by h_1 will be given. Also some example of using this formula for q-scale case will be presented.