Mathematical Model in a Restricted Sense

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The concept of mathematical model in a restricted sense was introduced and the approach was presented which allowed to construct such models. There was considered an example of construction of hierarchy of mathematical models of the resistor which resistance and total specific heat depends on its temperature. The statements have been made, which allow to identify the mathematical model in a restricted sense. Such model as opposed to other mathematical models of the examined resistor has incomplete measure properties of fullness, accuracy, adequacy, productivity and economy with regard to concrete research. Mathematical model in a restricted sense is a valuable intelligent product. The application of such a model reduces the time and study funds, allows to efficiently use the possibilities of mathematical modeling in the absence of rich practical experience in the construction of mathematical models of the objects under study.

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