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## finite variation process

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In the theory of stochastic processes, the term *finite-variation process* is used to refer to a process  $X_t$  whose paths are right-continuous and have finite total variation over every compact time interval, with probability one. See, for example, the Poisson process.

It can be shown that any function on the real numbers with finite total variation has left and right limits everywhere. Consequently, finite variation processes are always cadlag.