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Quantization for probability distributions concerns the best approximation of a d -dimensional probability distribution P by a discrete probability with a given number n of supporting points. In this paper, an infinitely generated nonhomogeneous Borel probability measure P is considered on \mathbb{R} . For such a probability measure P , an induction formula to determine the optimal sets of n -means and the n th quantization error for every natural number n is given. In addition, running the induction formula in computer algorithm, some results and observations about the optimal sets of n -means are obtained. (Received September 11, 2016)