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Exponential inequalities and complete convergence for a LNQD sequence. (English)

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Summary: Some exponential inequalities for a linearly negative quadrant dependent sequence are obtained. By using the exponential inequalities, we give the complete convergence and almost sure convergence for a linearly negative quadrant dependent sequence. In addition, the asymptotic behavior of the probabilities for the partial sums of a linearly negative quadrant dependent sequence is studied.

MSC:

60E15 Inequalities; stochastic orderings

60F15 Strong limit theorems

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Keywords:

linearly negative quadrant dependent sequence; negative quadrant dependent sequence; exponential inequalities; complete convergence

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