

# Counting ordered patterns in words generated by morphisms

## I. Rises, descents, and repetitions with gaps

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September 21, 2004

### **Abstract**

We start a general study of counting the number of occurrences of ordered patterns in words generated by morphisms. The case of rises and descents is considered. We give recurrence formulas in the general case. We deduce exact formulas for a particular family of morphisms.

Keywords: Ordered patterns, rises, descents, repetitions, morphisms.

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