Bifurcation analysis of a discrete-time prey-predator model

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Outline

- ▶ Description and interpretation of a discrete-time predator-prey model

- ▶ Determination of fixed points

- ▶ Bifurcation analysis
  - ▶ Period-doubling bifurcation
  - ▶ Neimarck-Sacker bifurcation

- ▶ Numerical investigations
  - ▶ Bifurcation diagram of period-doubling bifurcation
  - ▶ Phase portrait changes at Neimark-Sacker bifurcation