

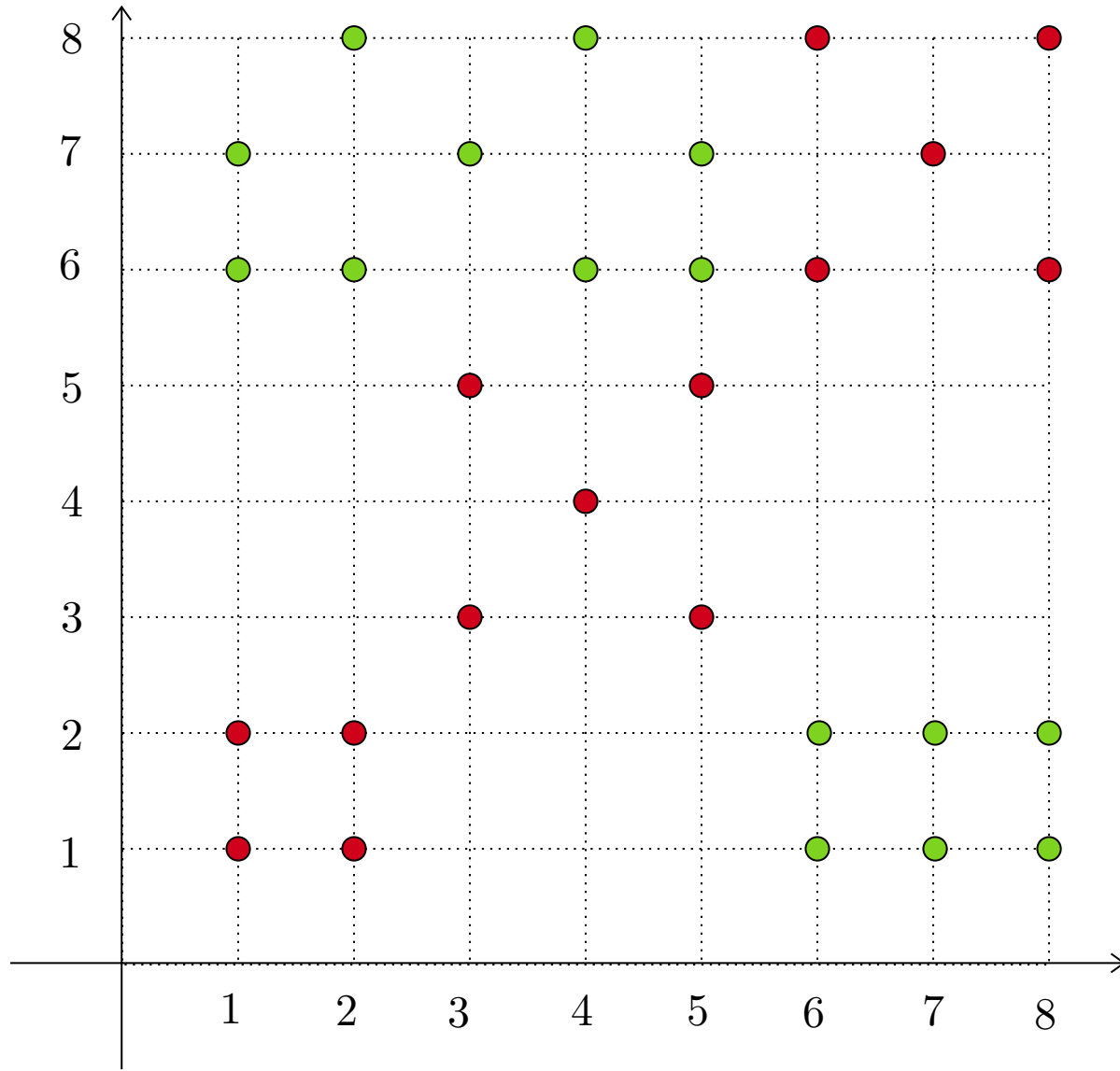
# Decision Tree - Examples

School Connect: Intro to DS & AI

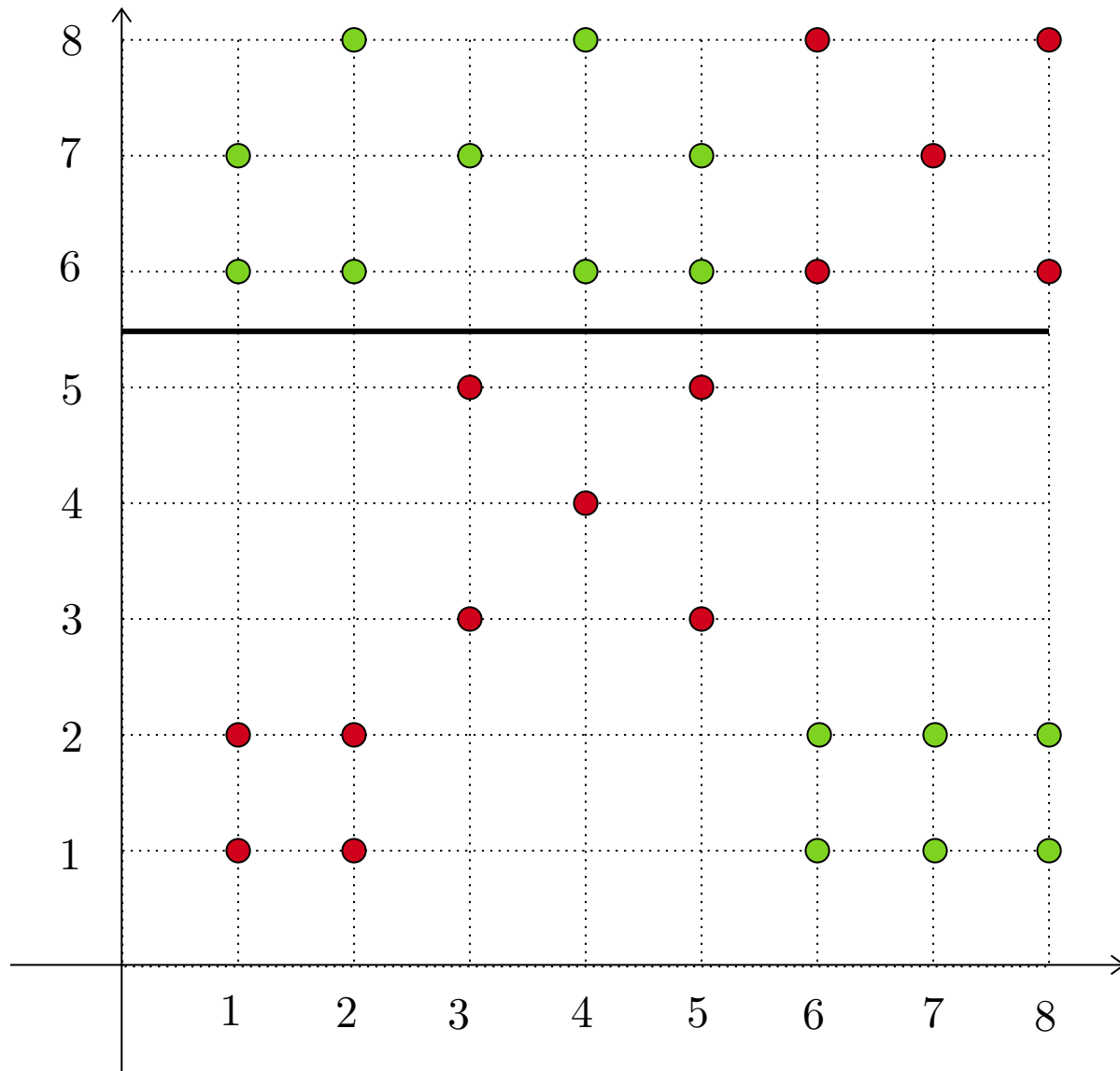
A Aniruddha

Indian Institute of Technology, Madras

# Growing a Tree

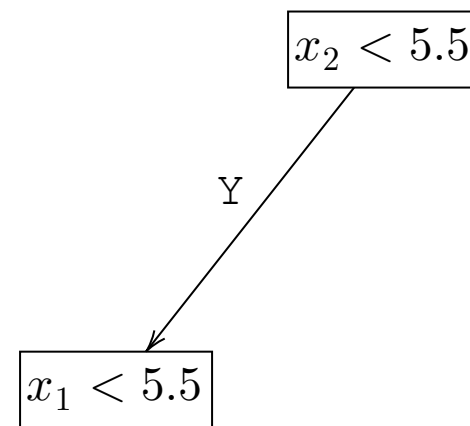
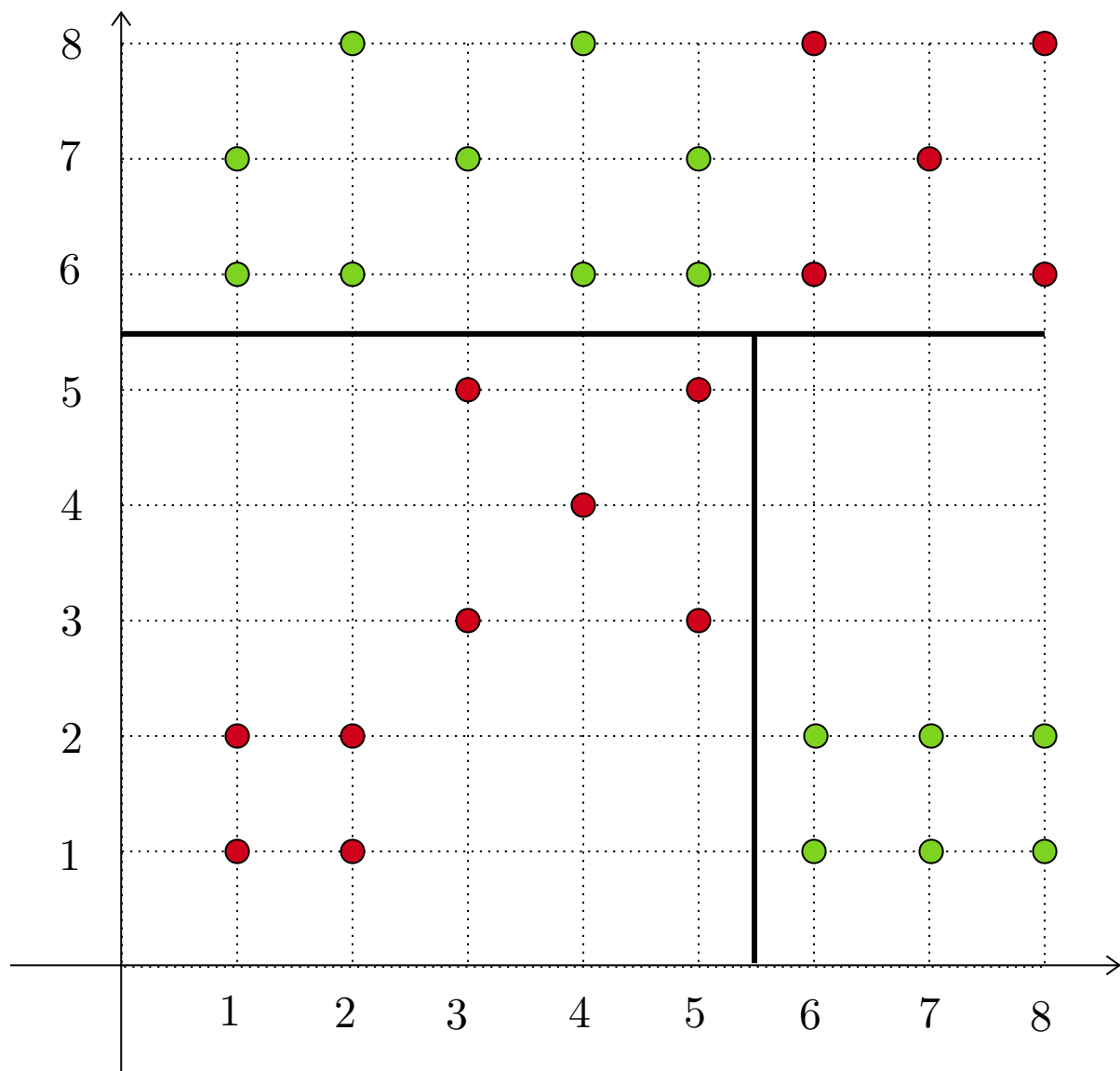


# Growing a Tree

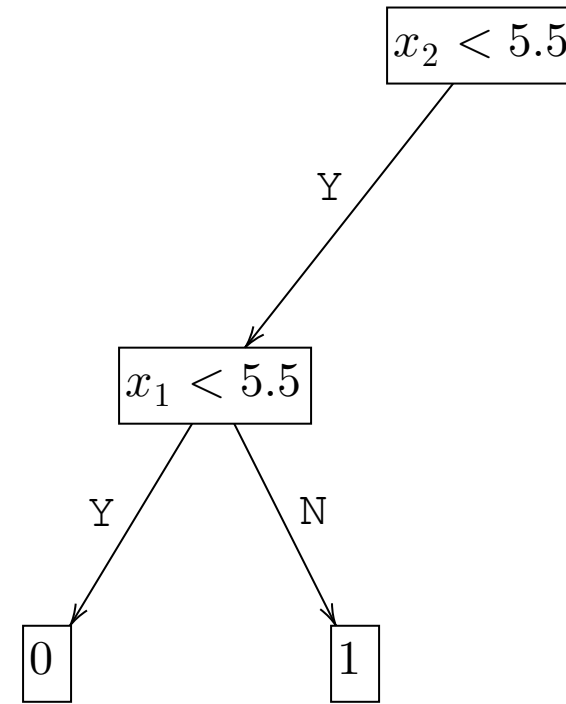
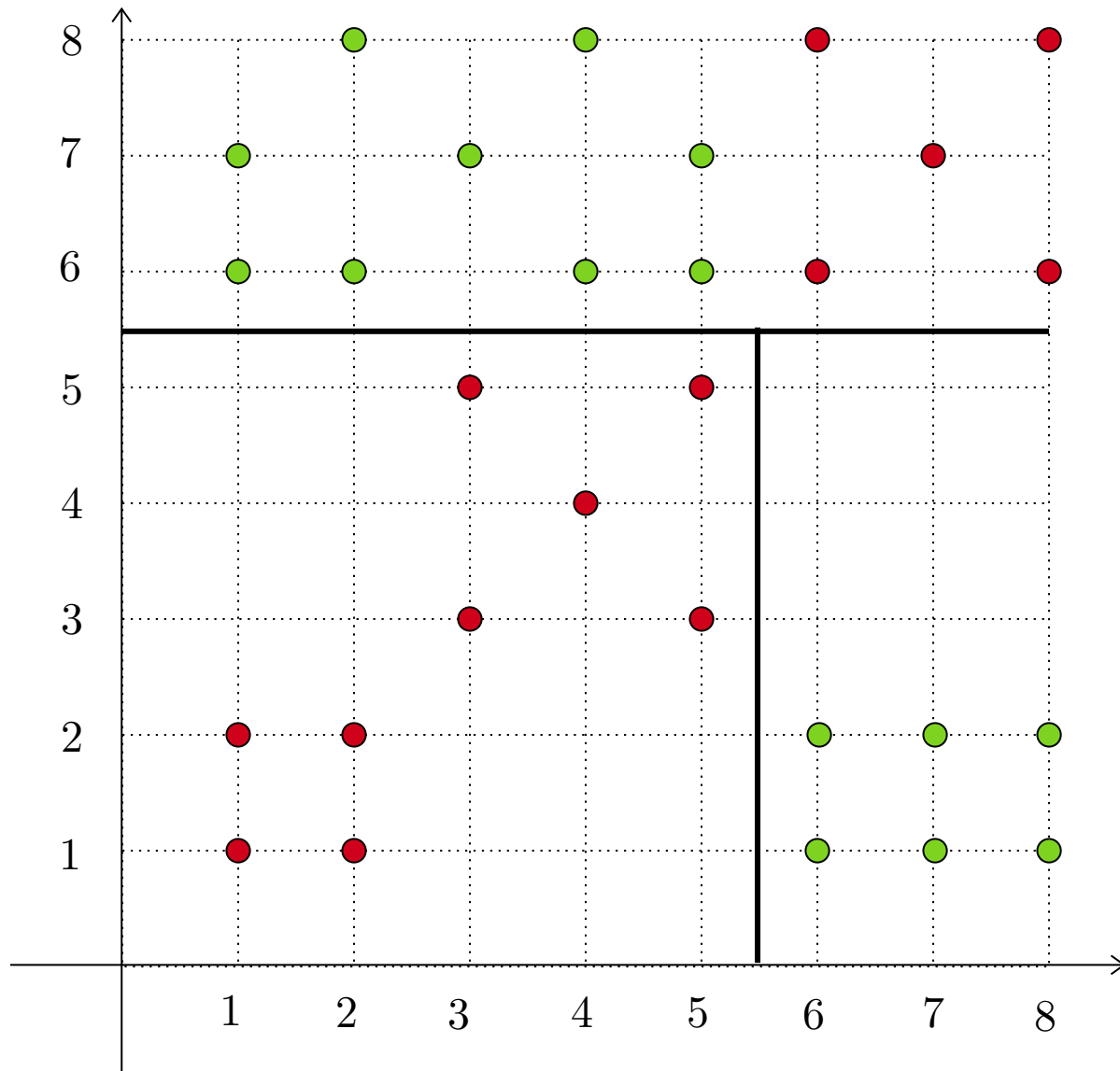


$$x_2 < 5.5$$

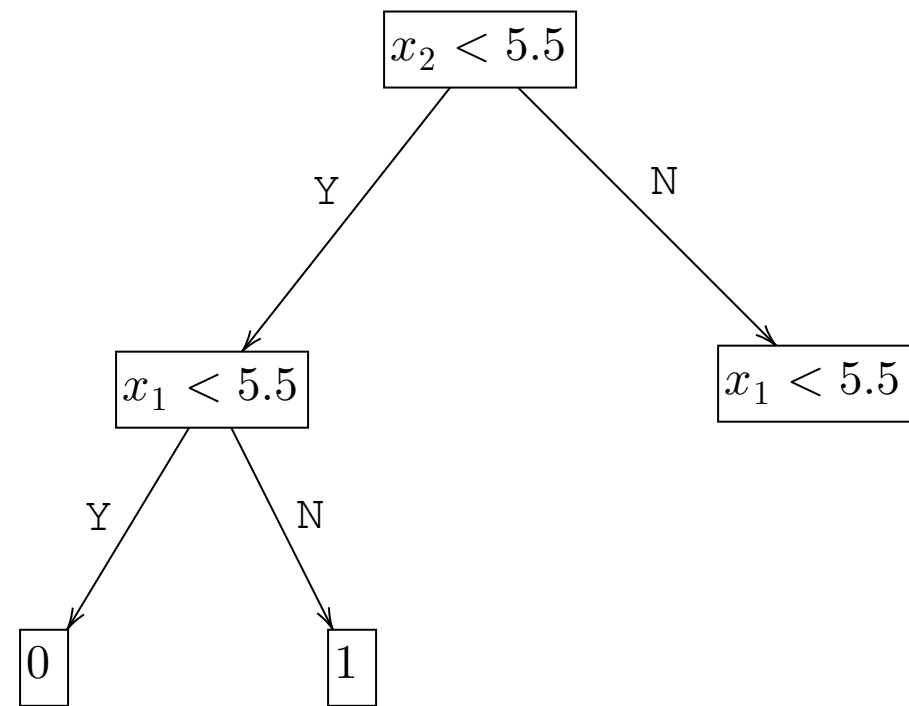
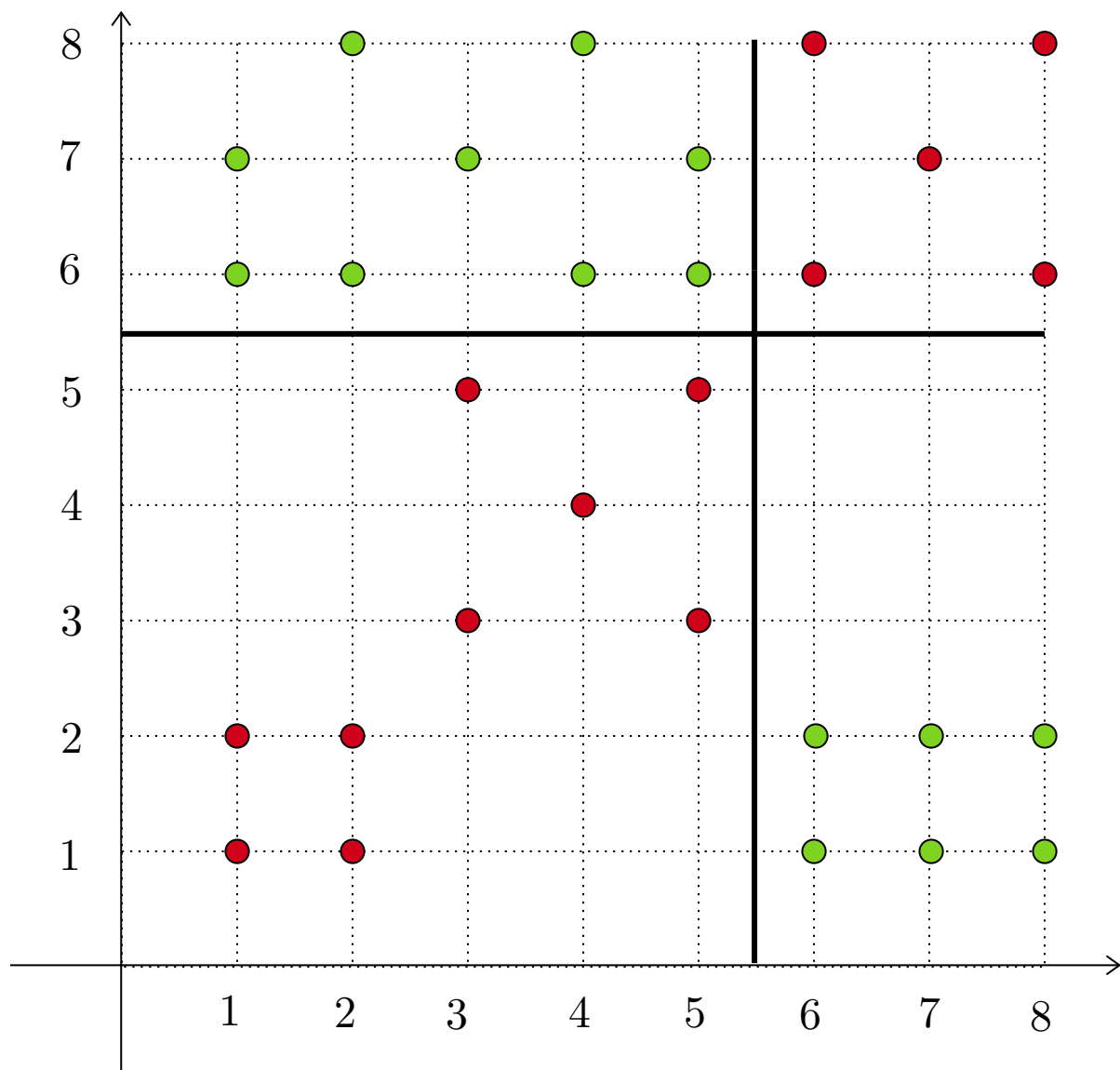
# Growing a Tree



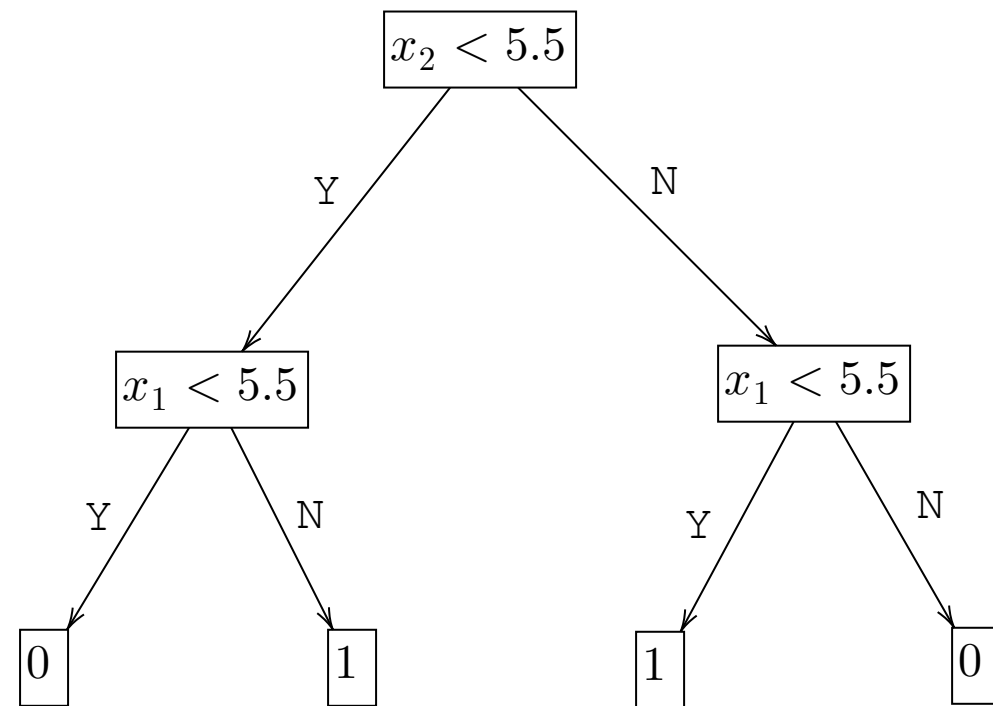
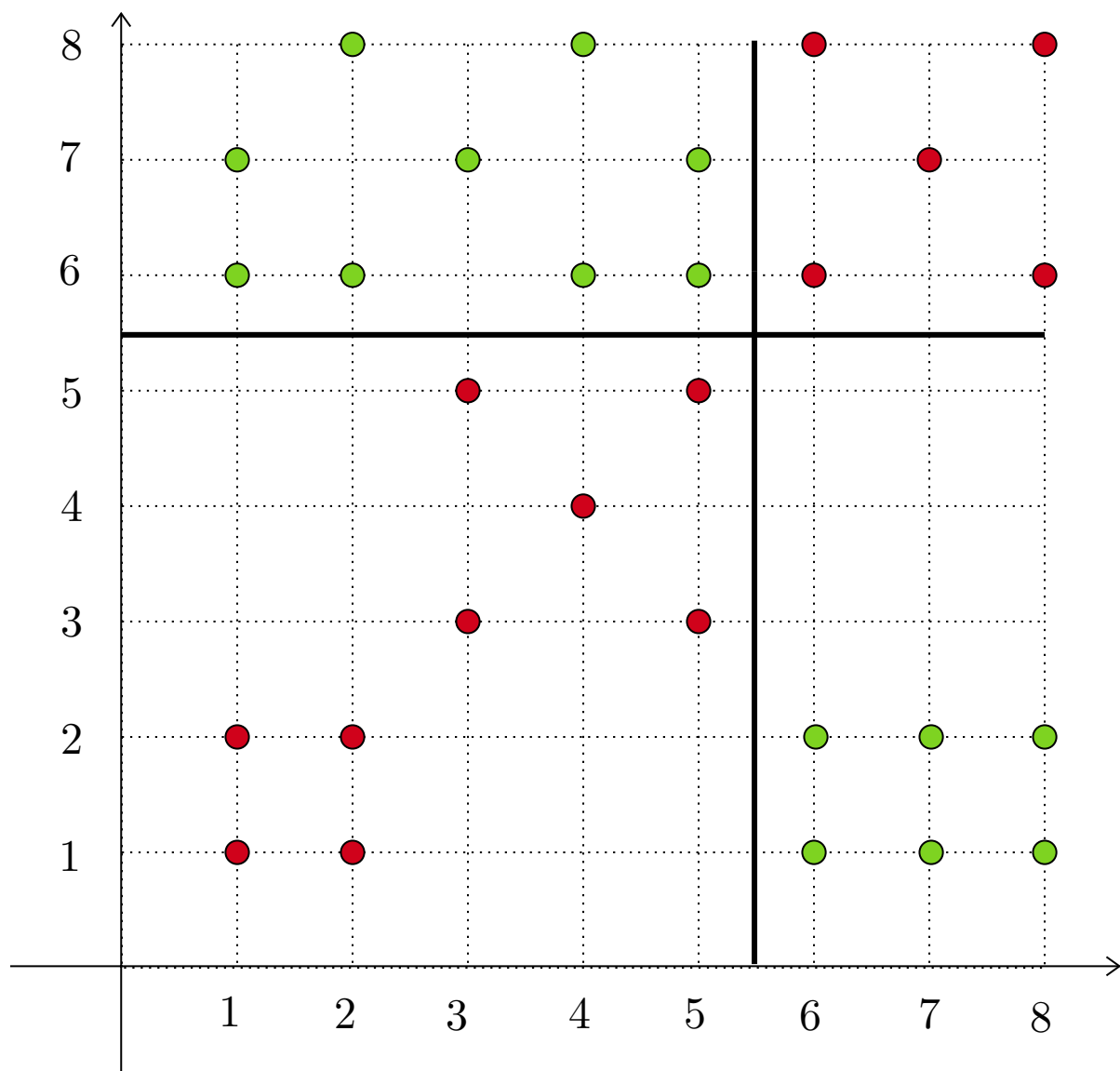
# Growing a Tree



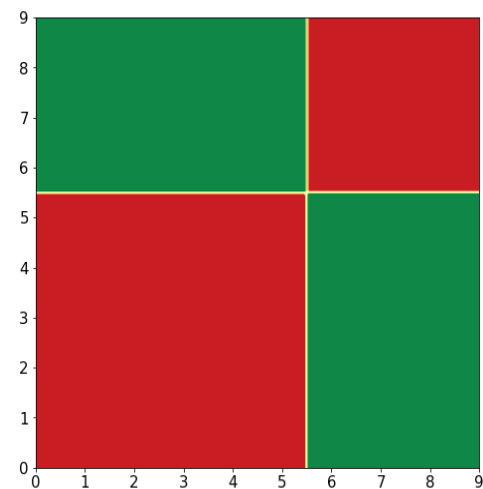
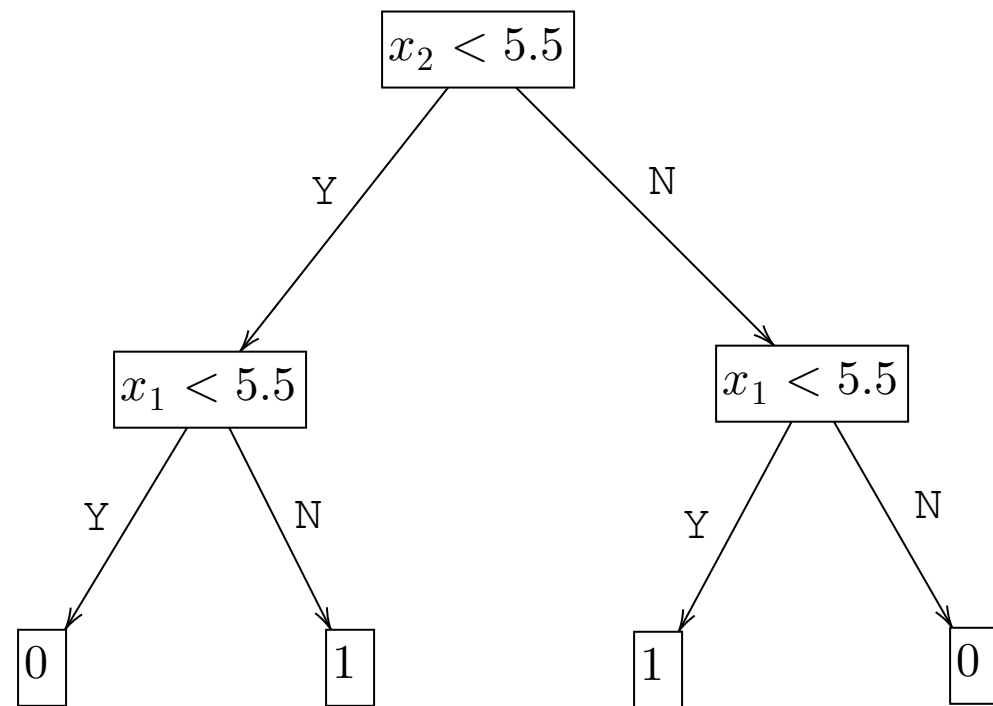
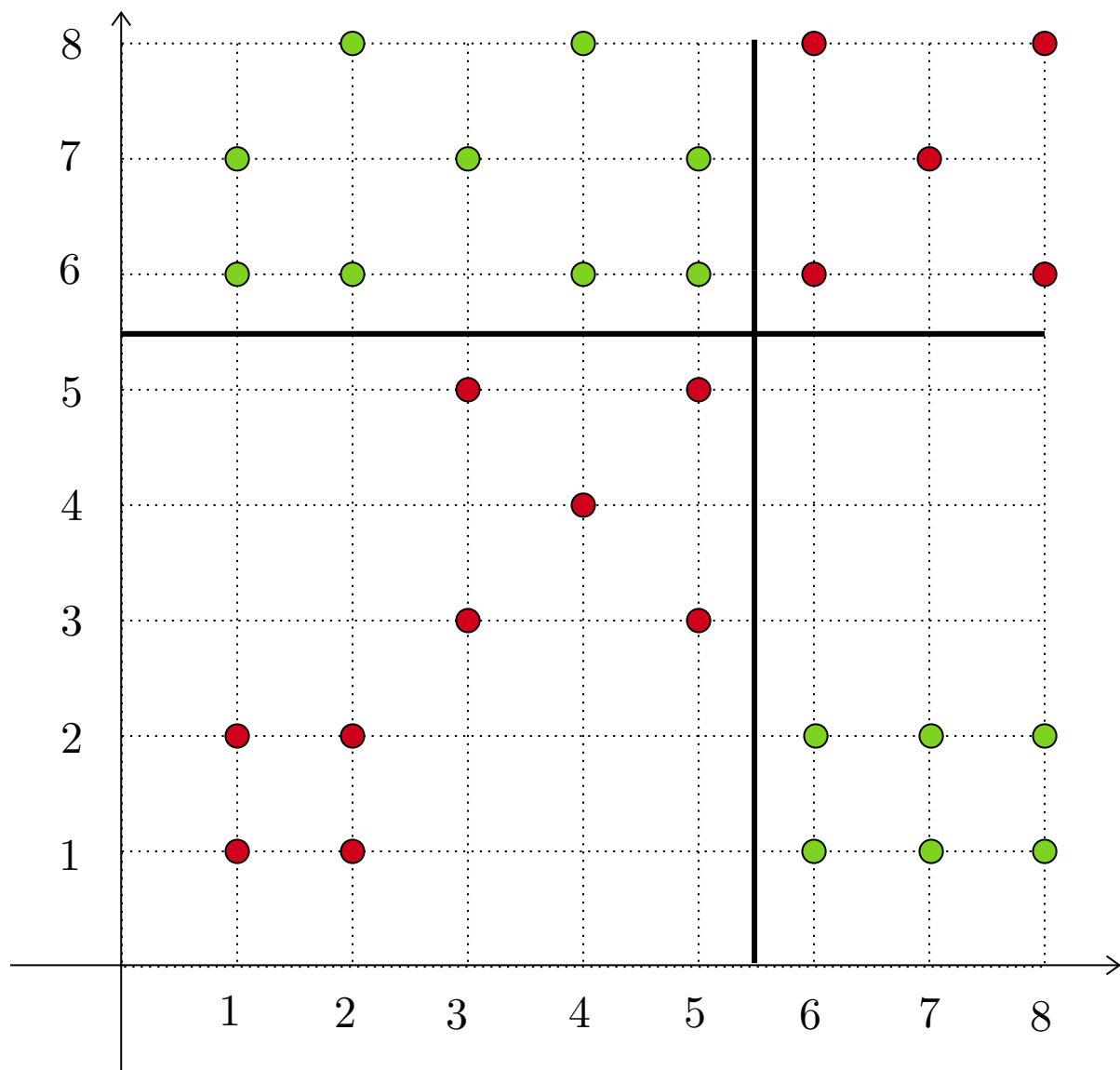
# Growing a Tree



# Growing a Tree

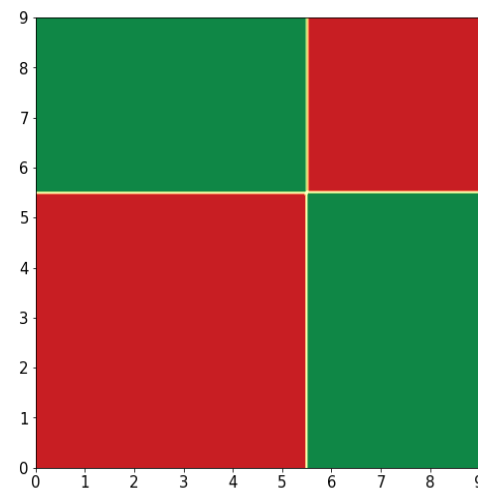
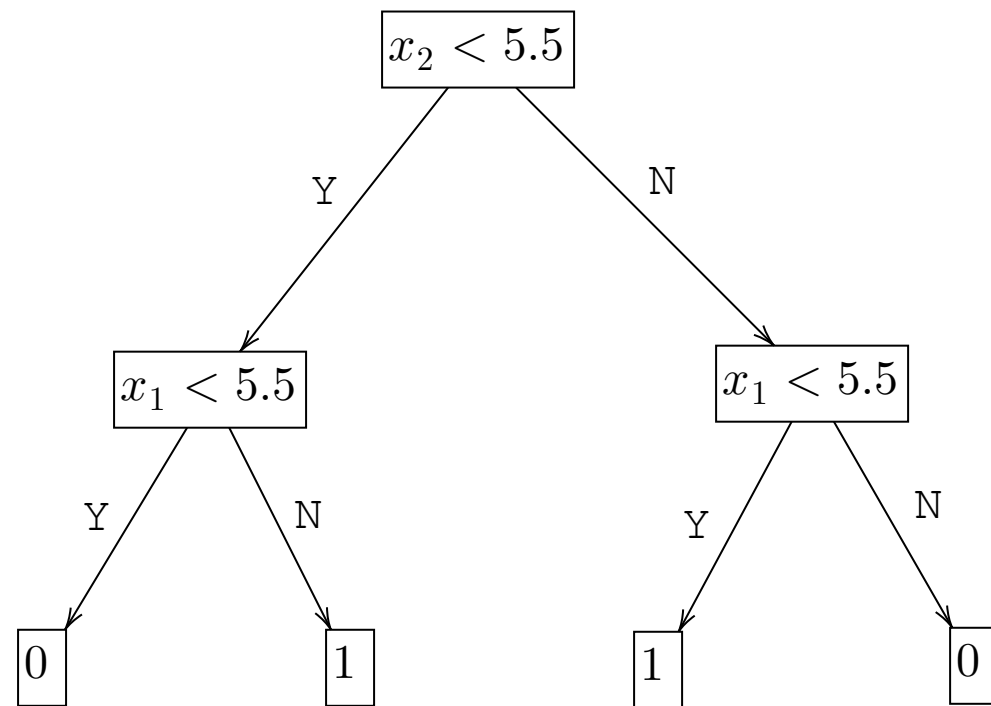
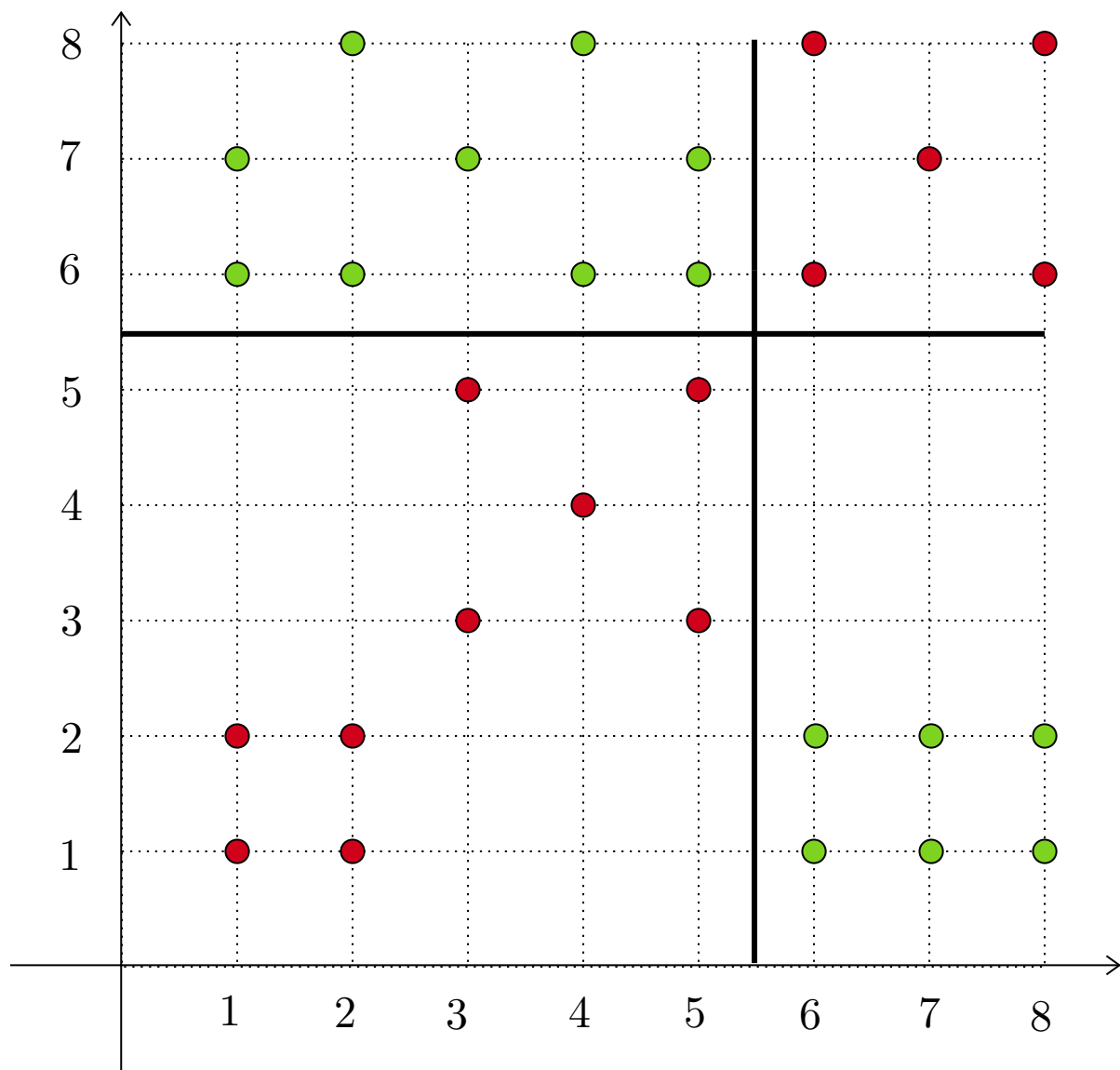


# Growing a Tree



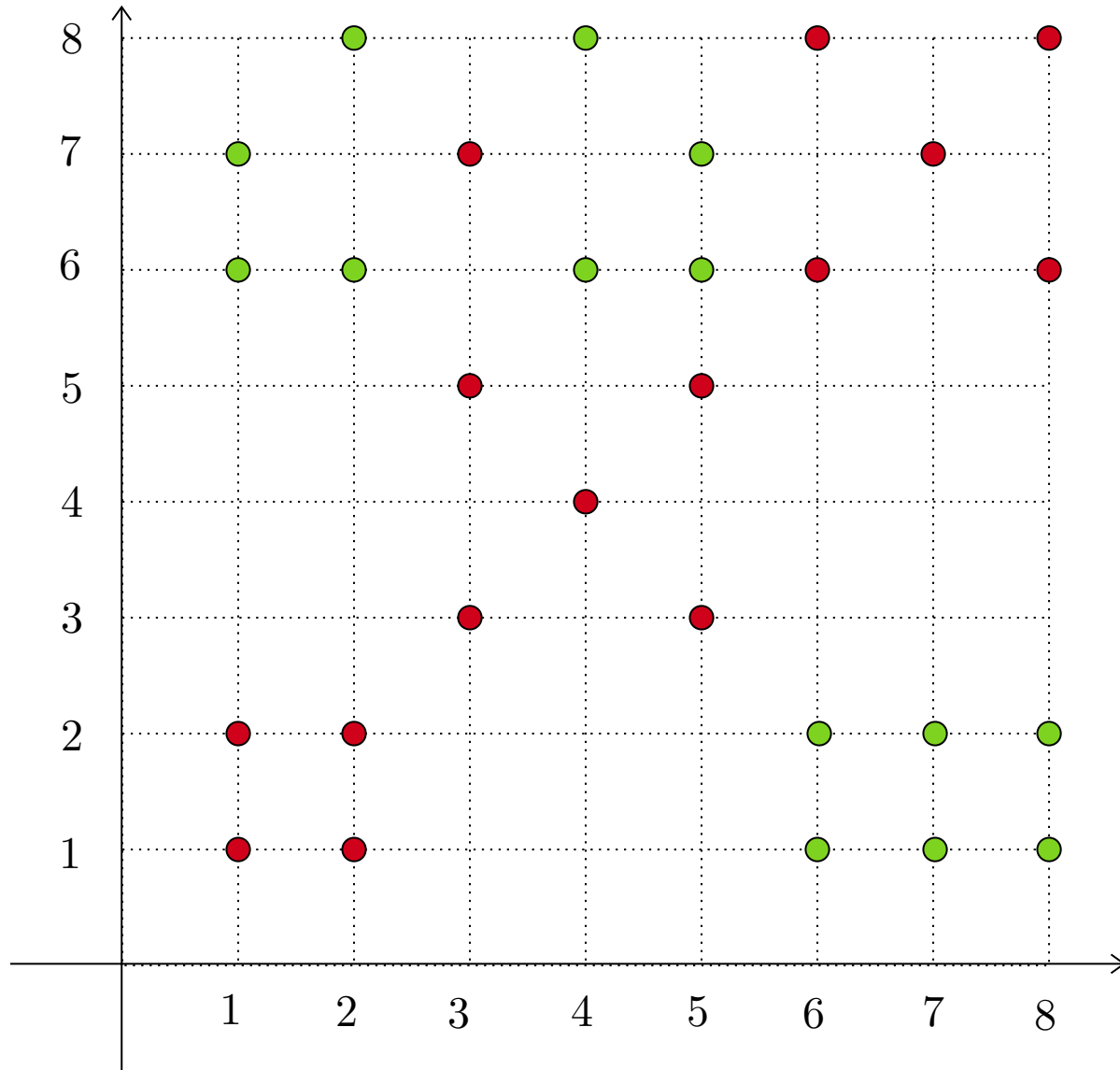


# Growing a Tree

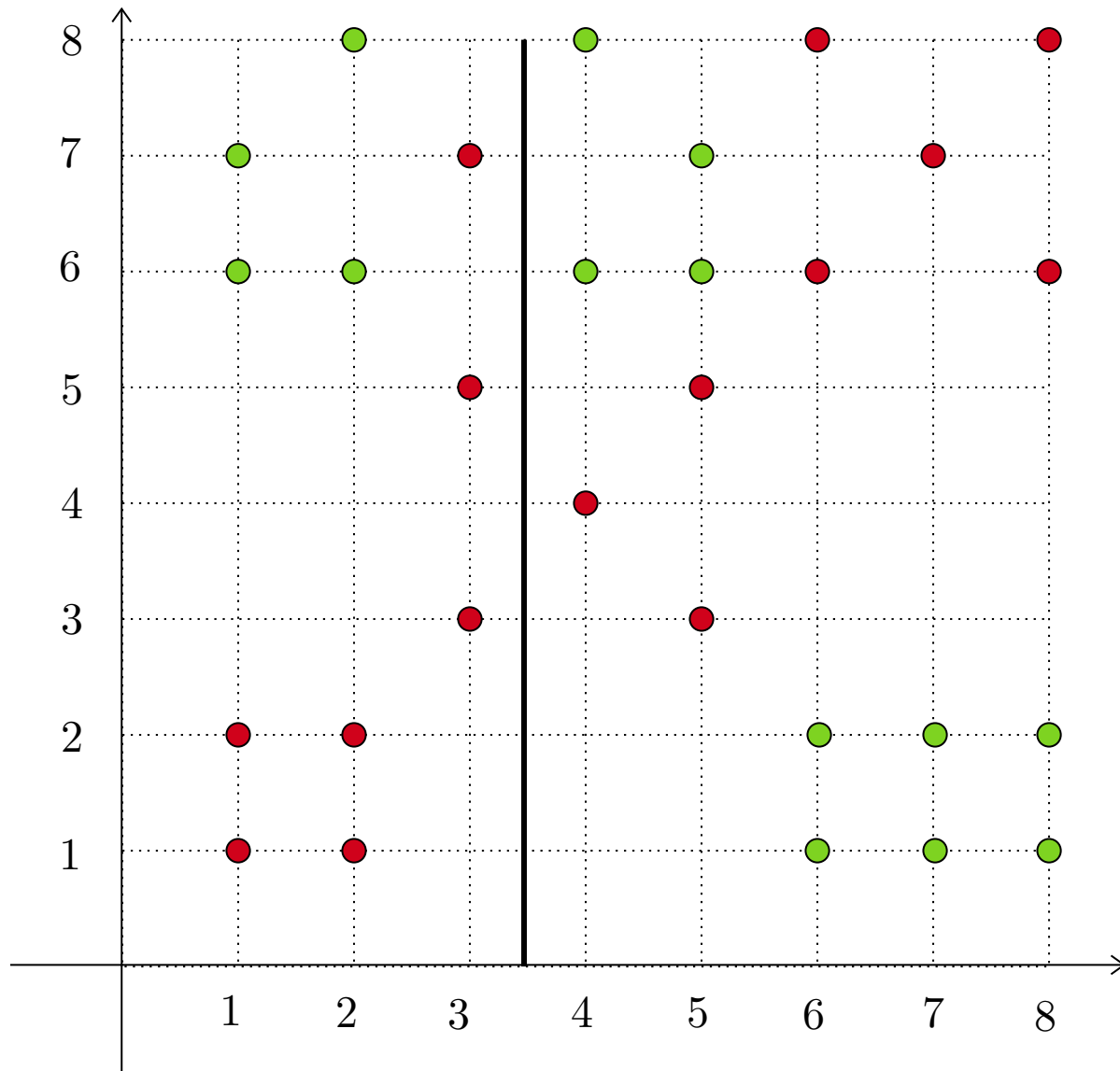


- 4 regions
- 4 leaves

# Growing a Tree

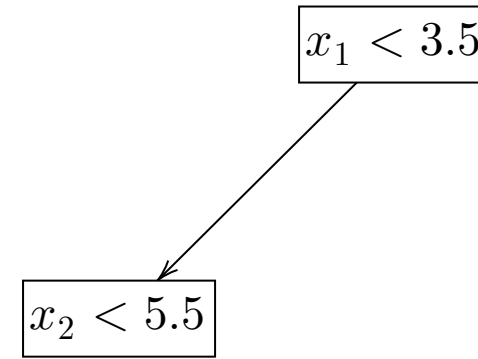
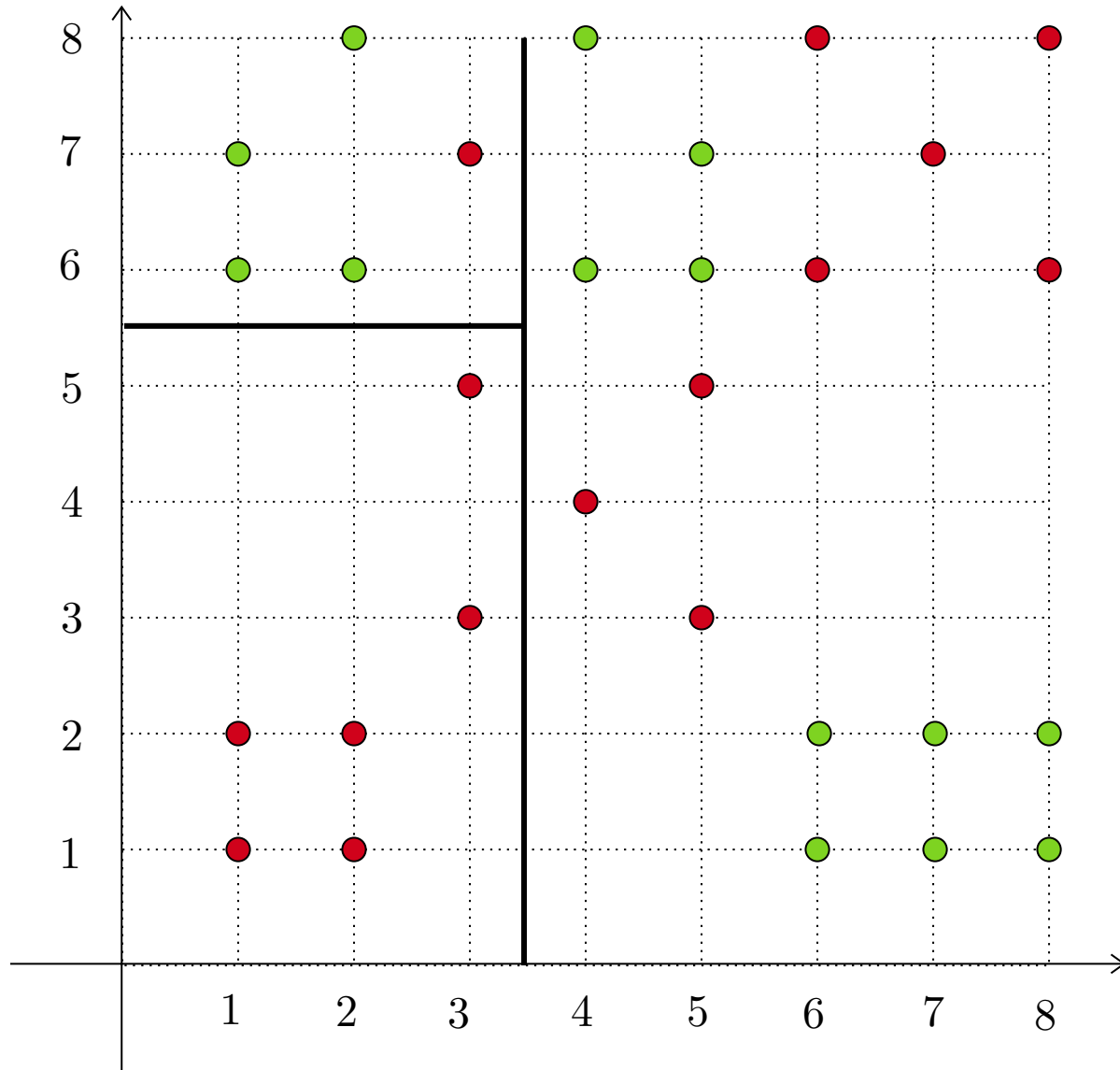


# Growing a Tree

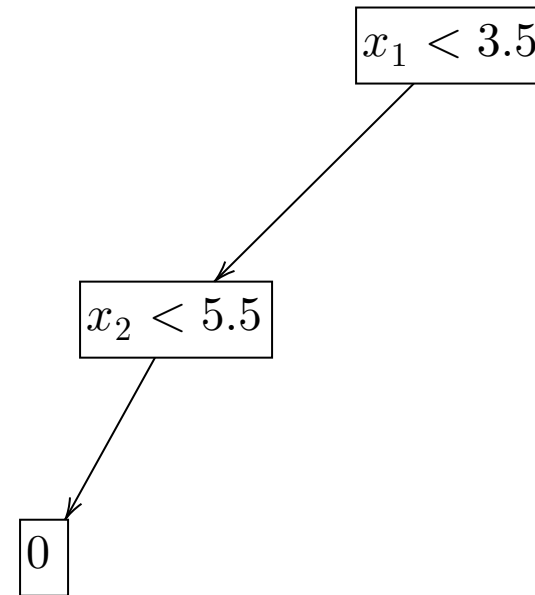
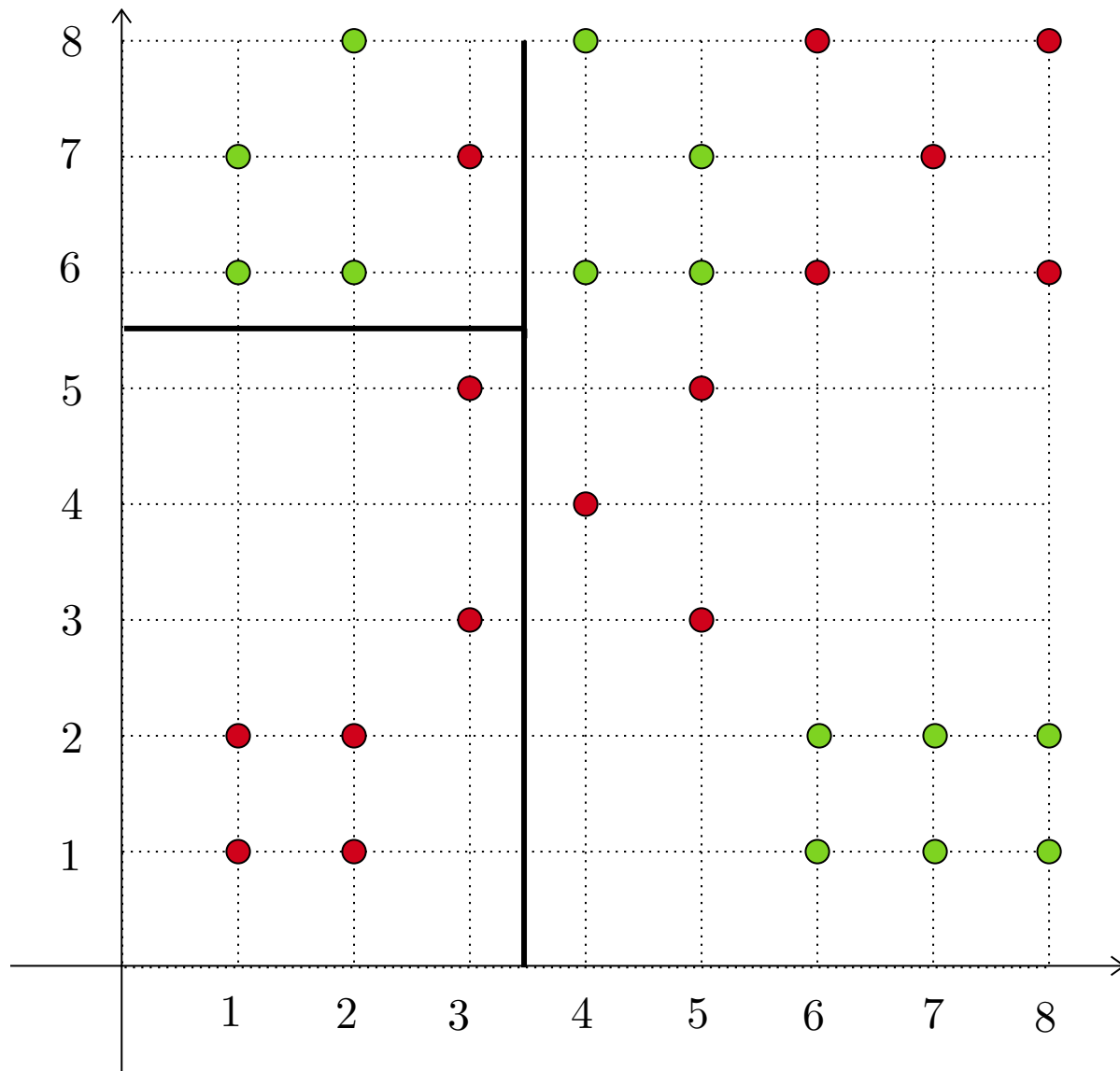


$$x_1 < 3.5$$

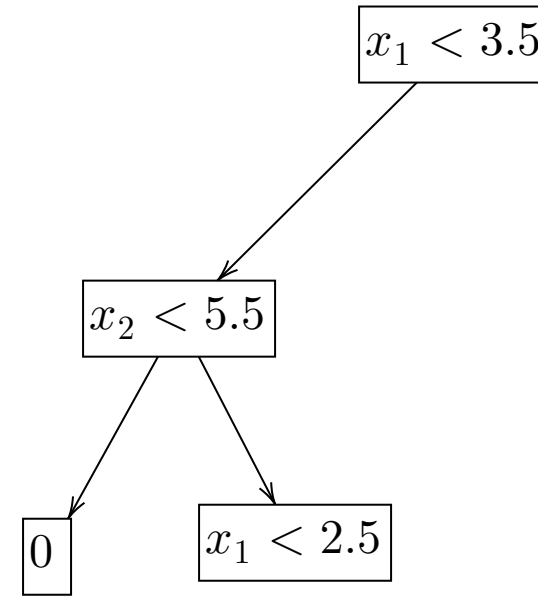
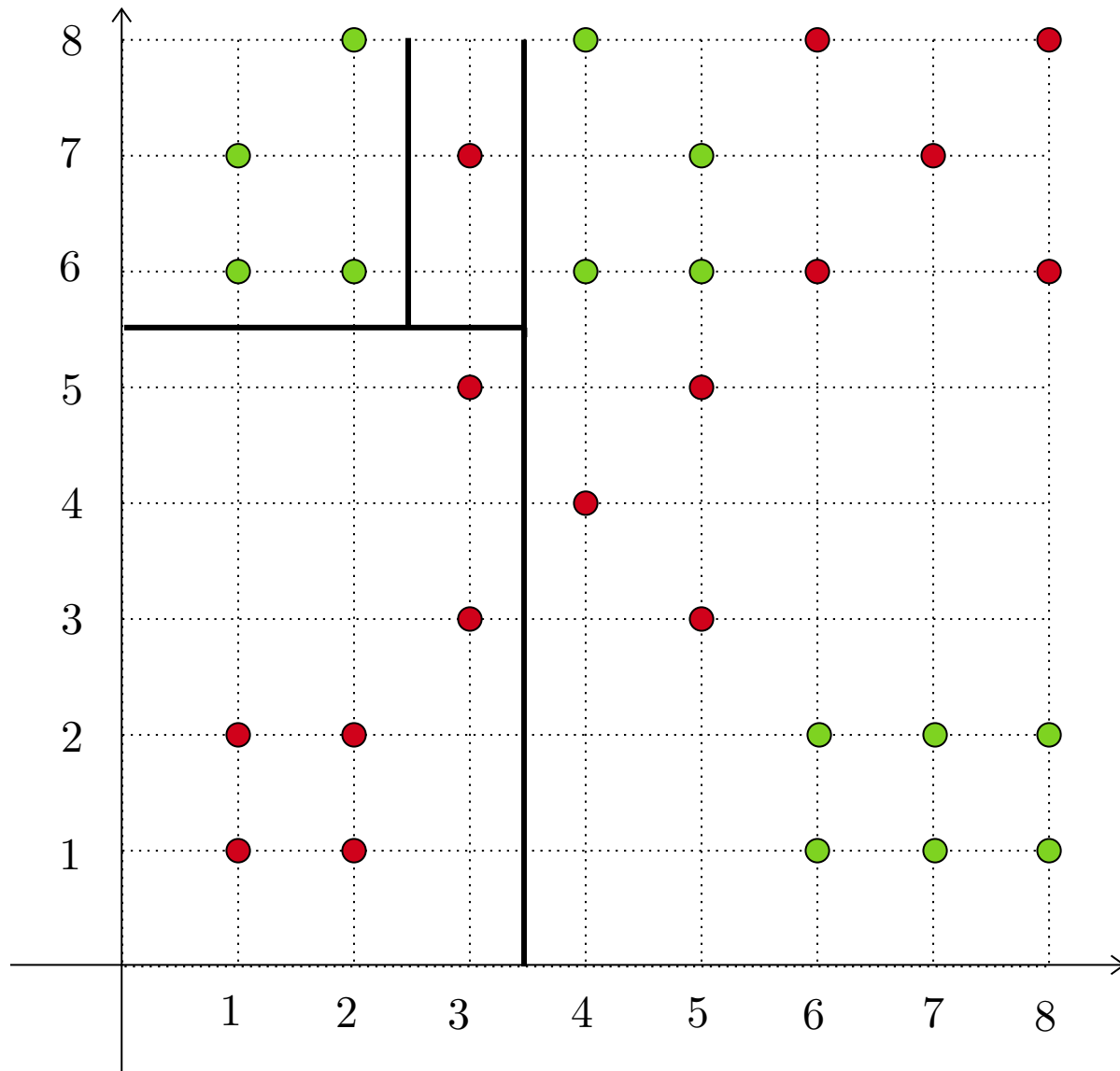
# Growing a Tree



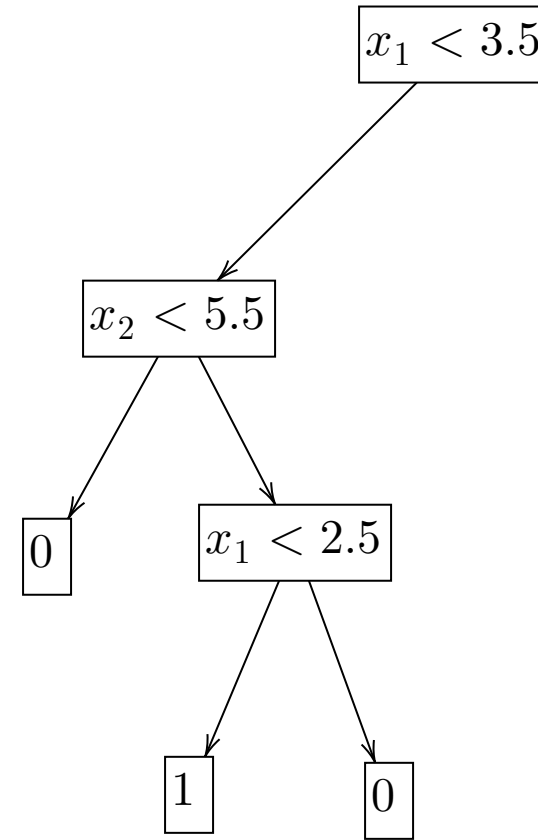
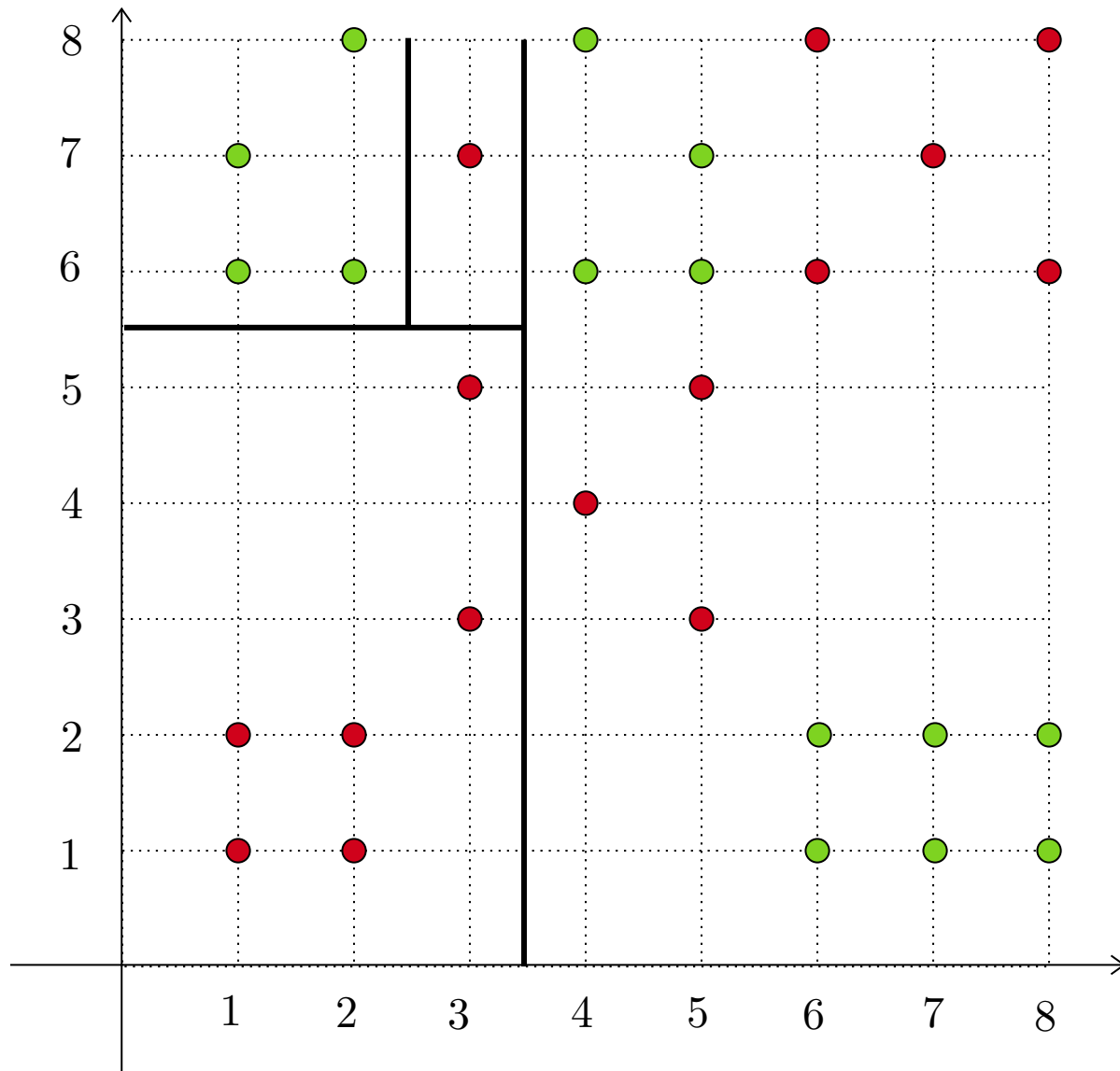
# Growing a Tree



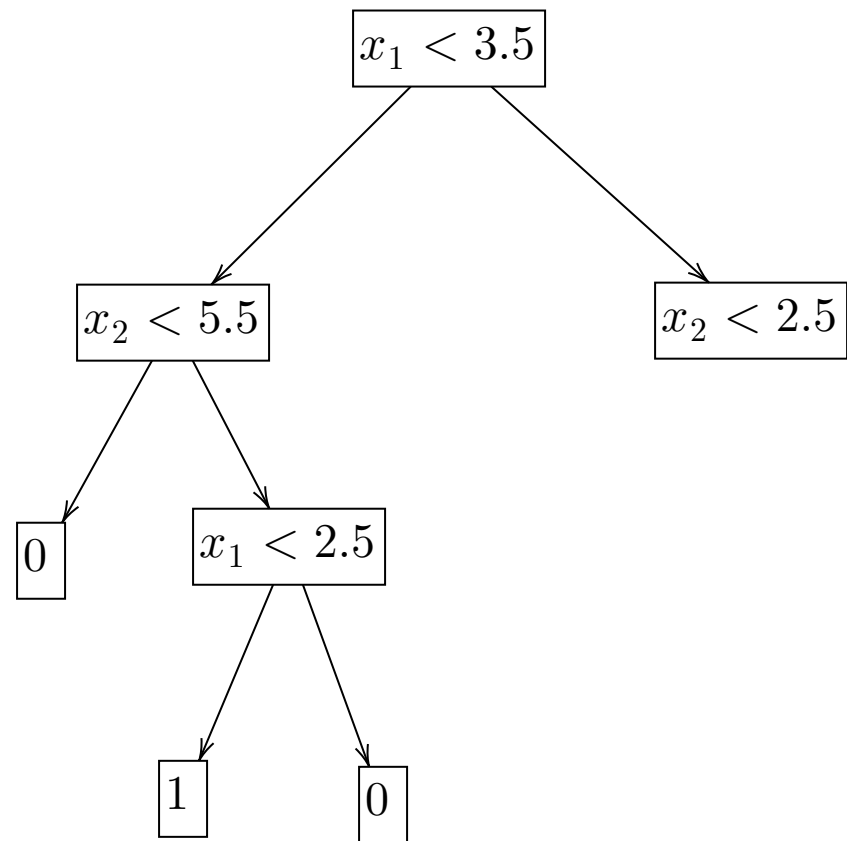
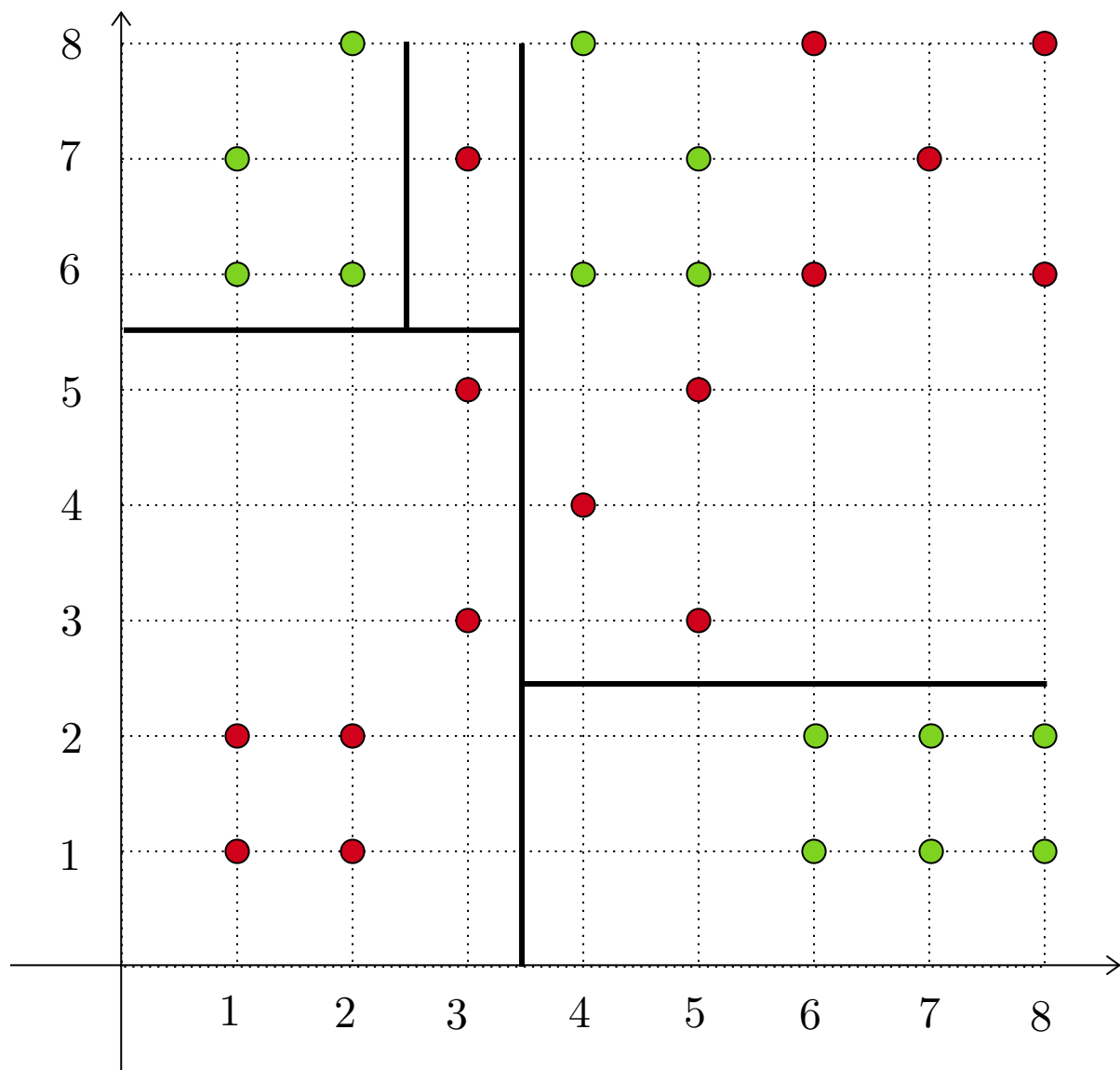
# Growing a Tree



# Growing a Tree

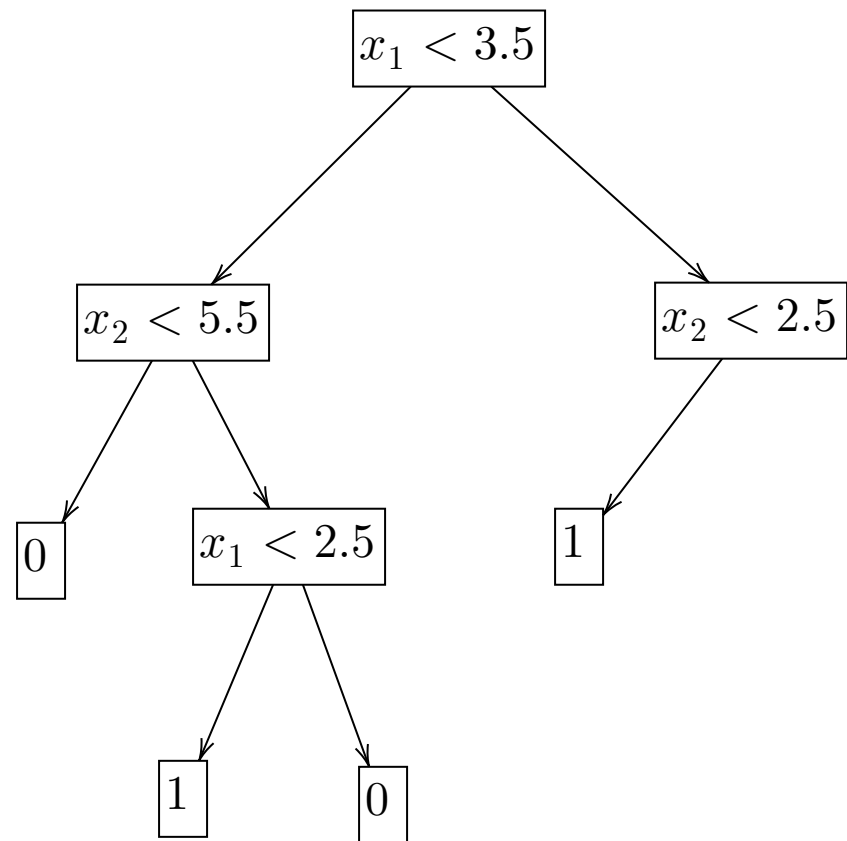
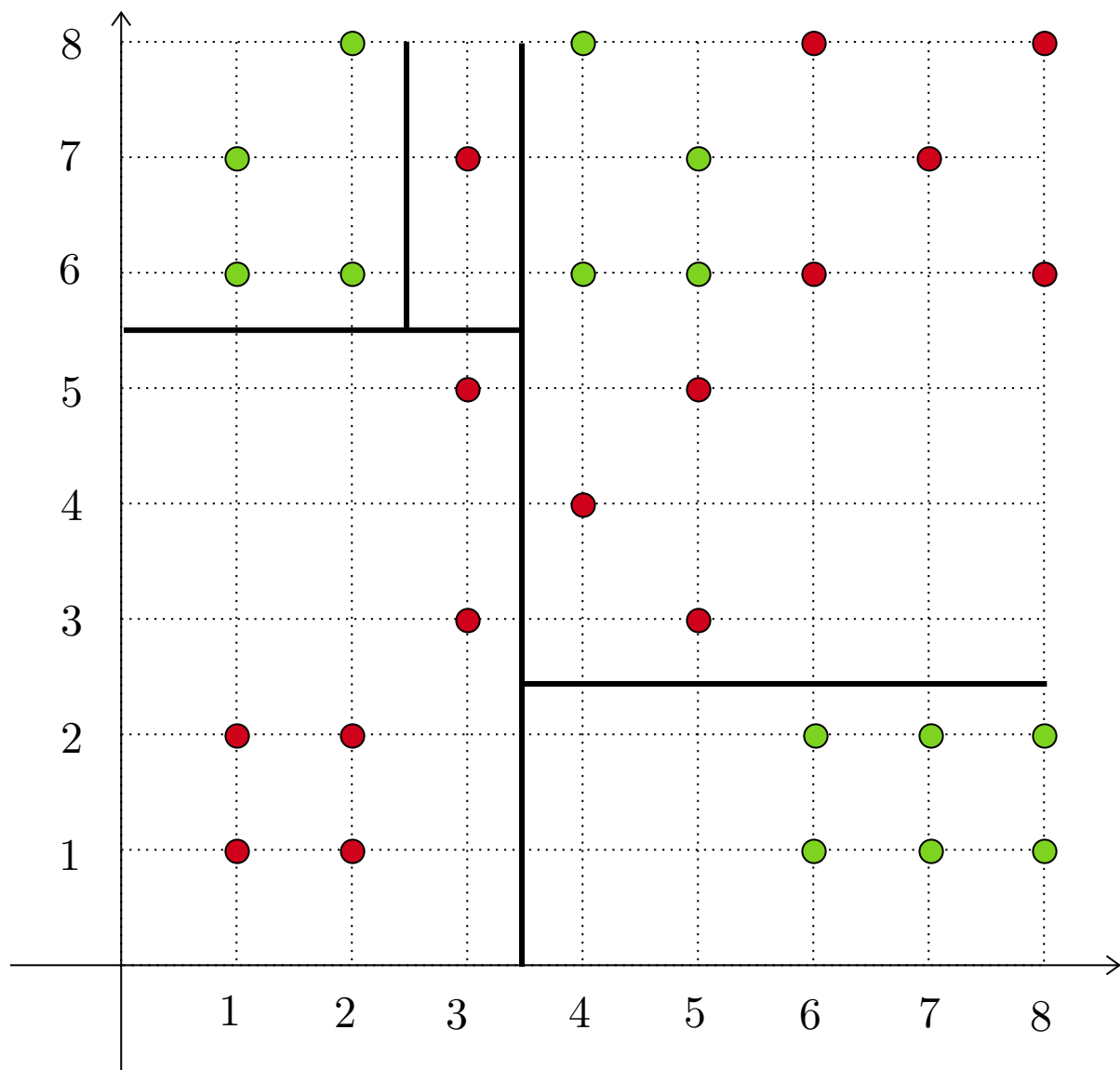


# Growing a Tree

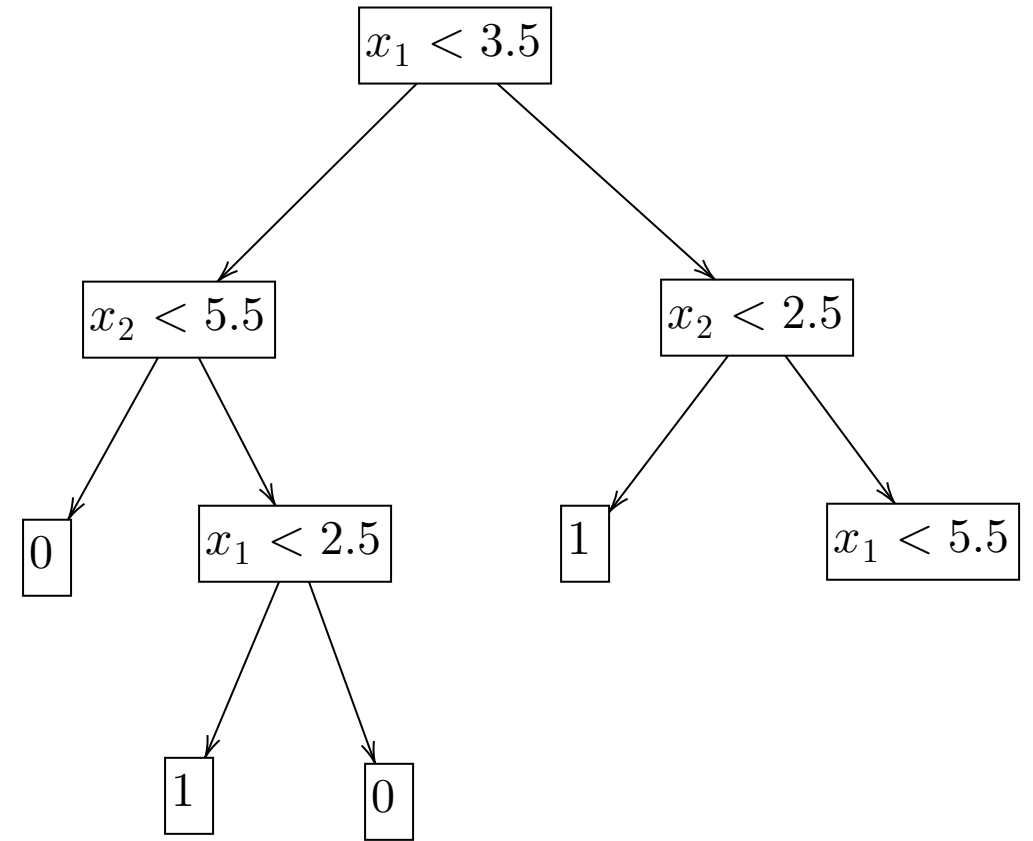
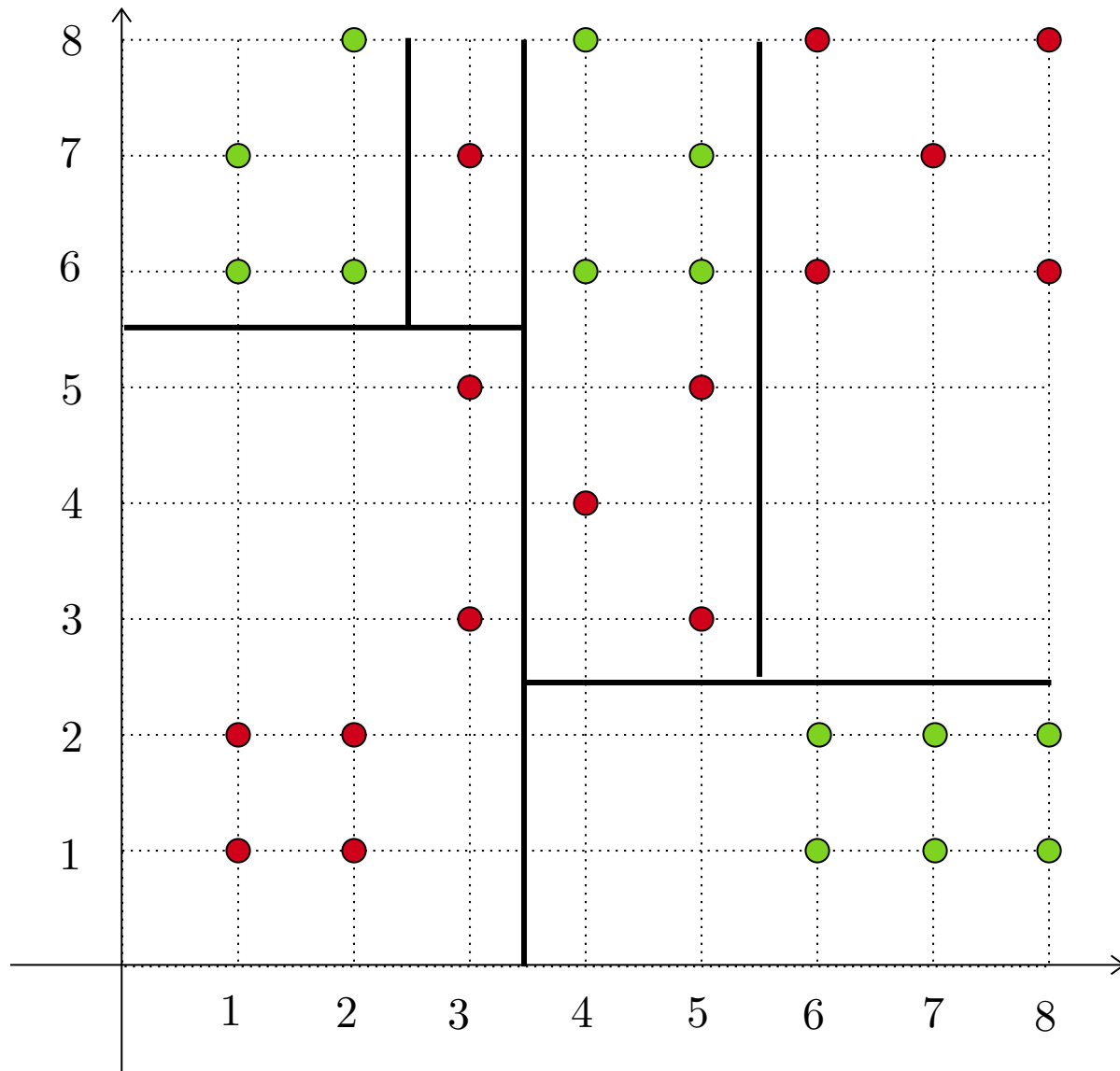




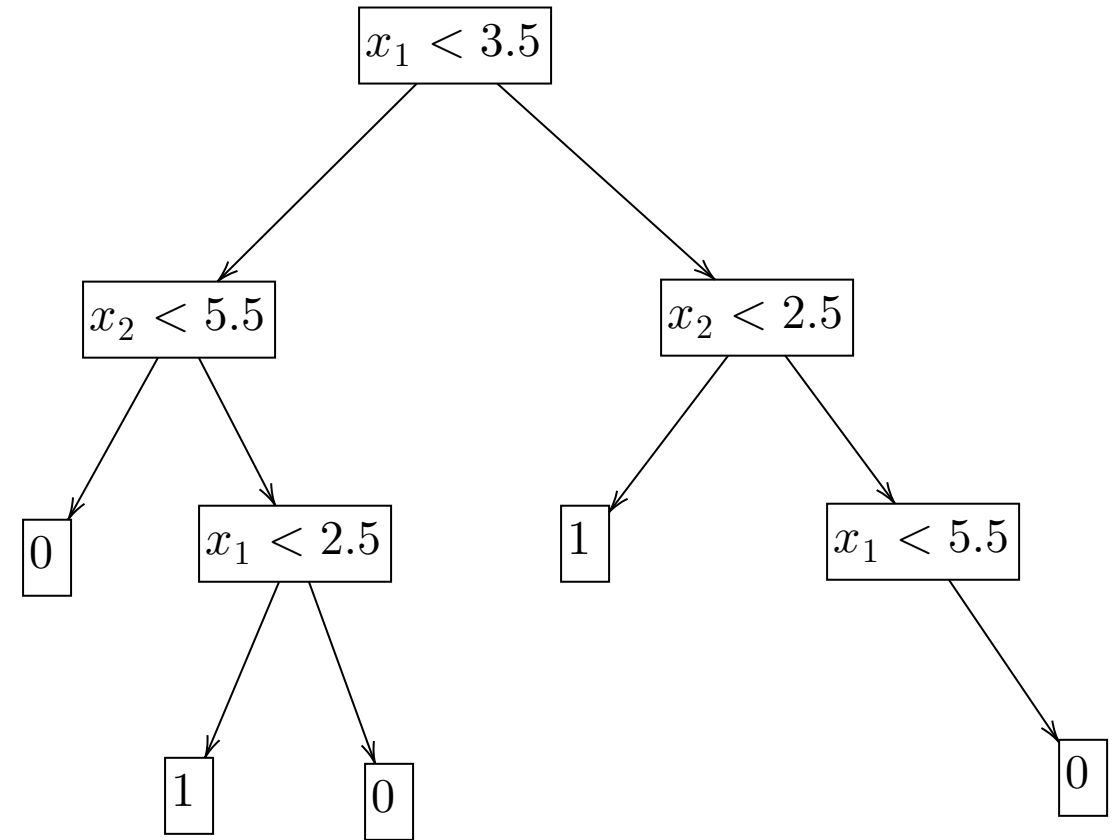
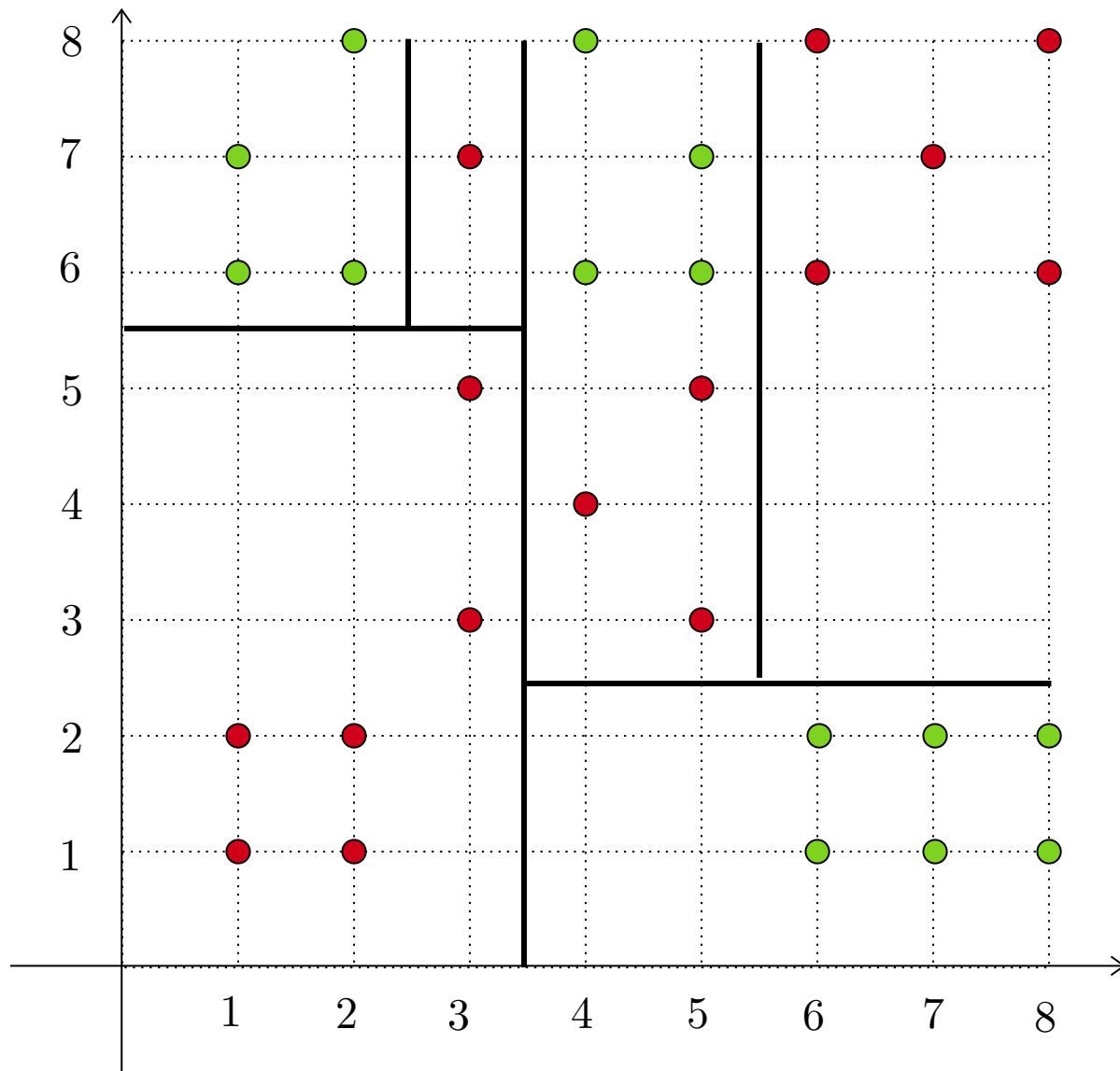
# Growing a Tree



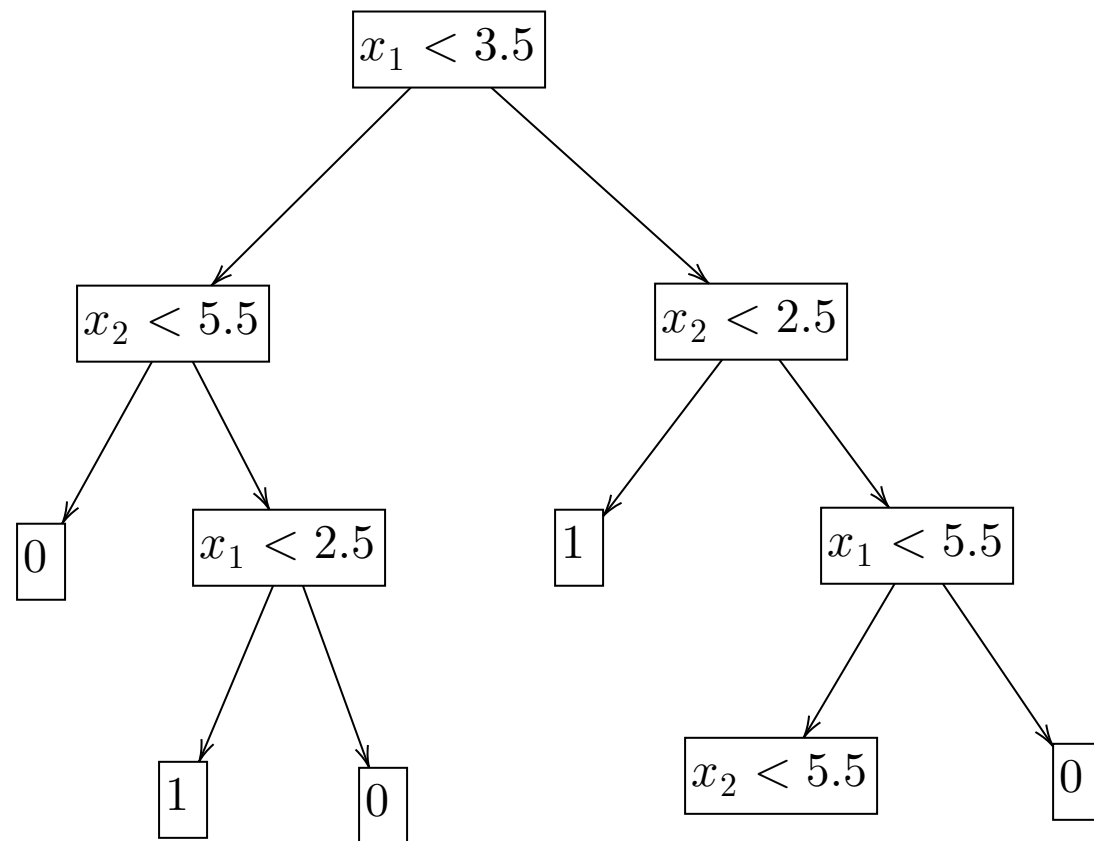
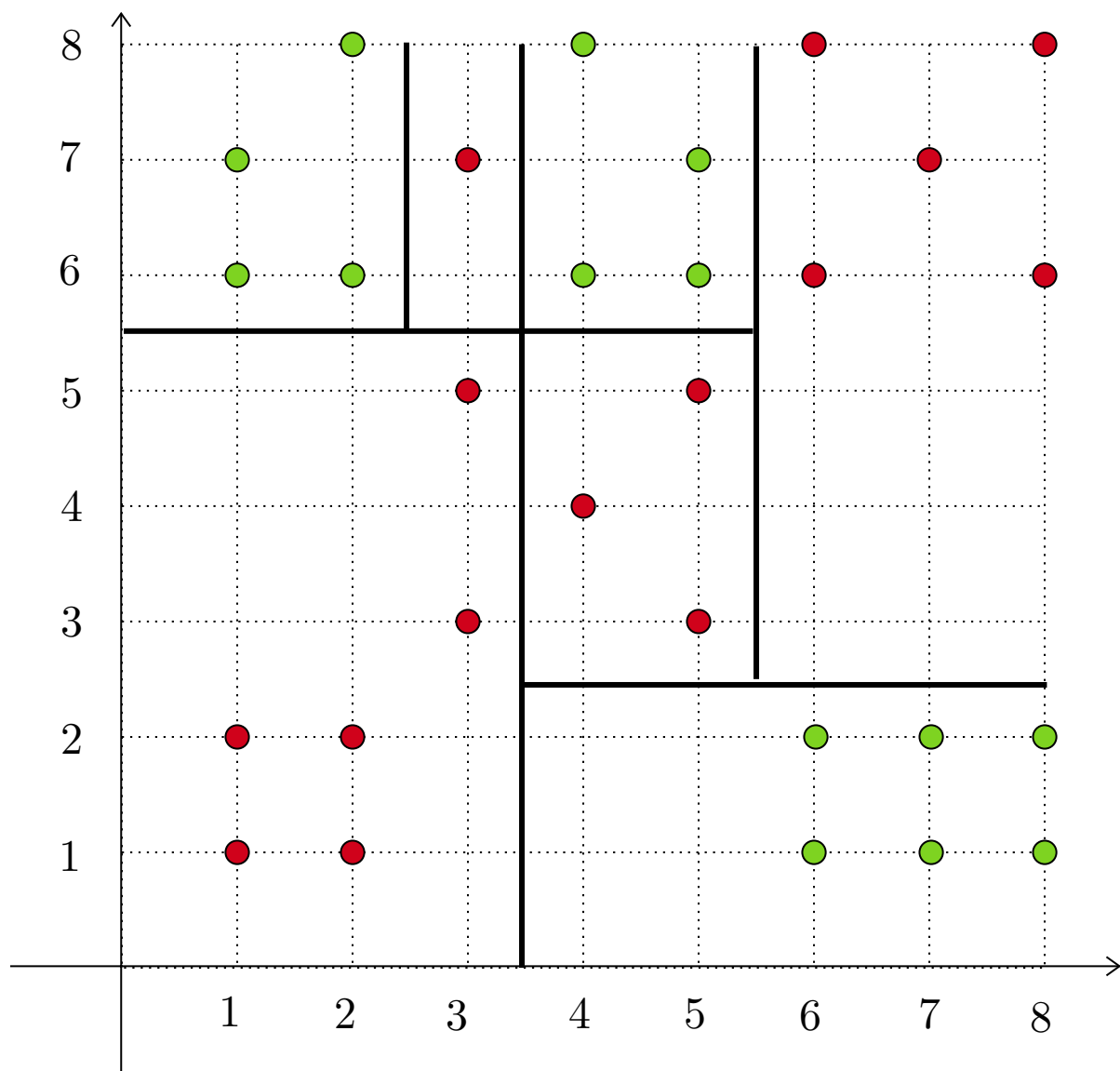
# Growing a Tree



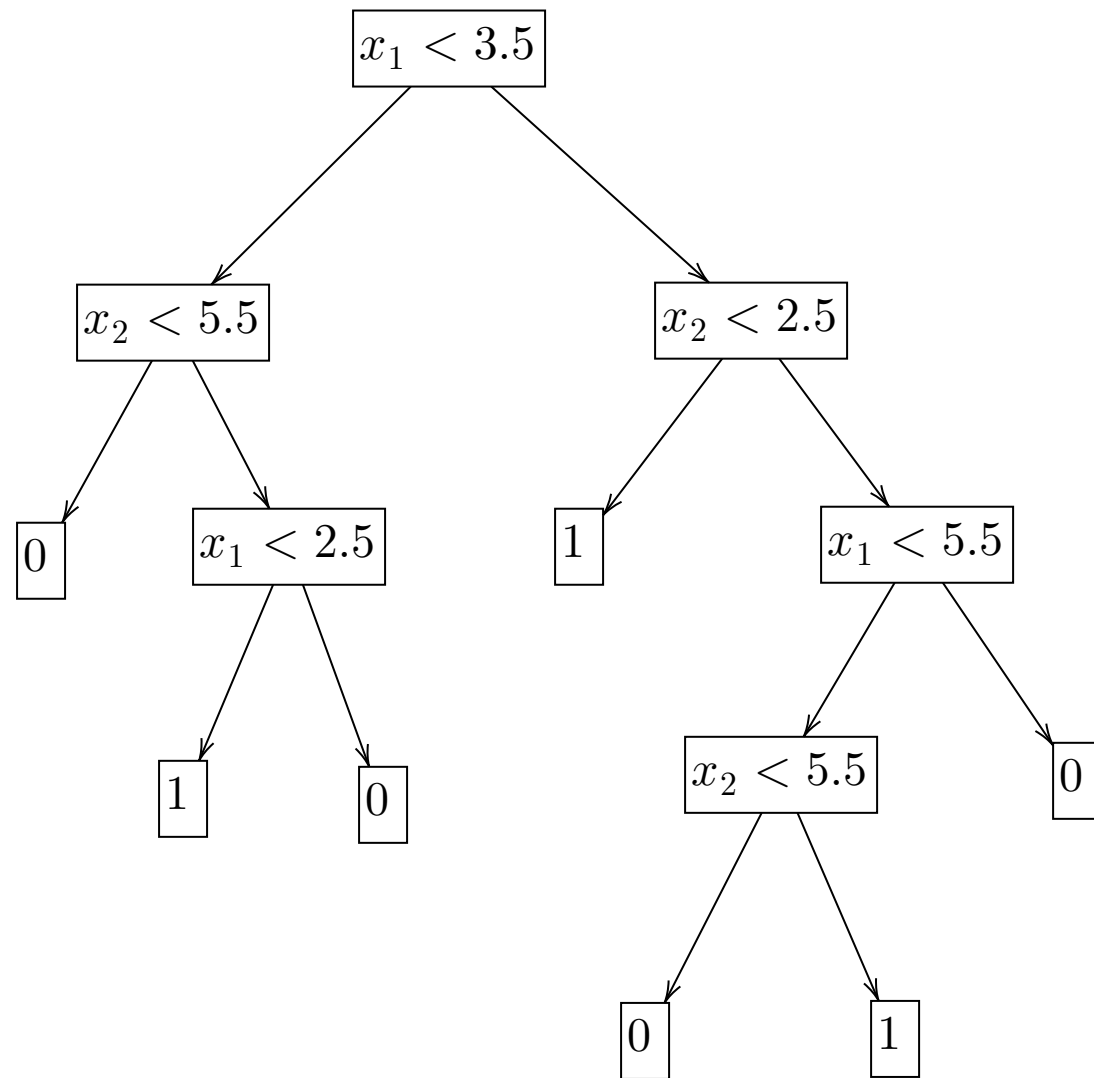
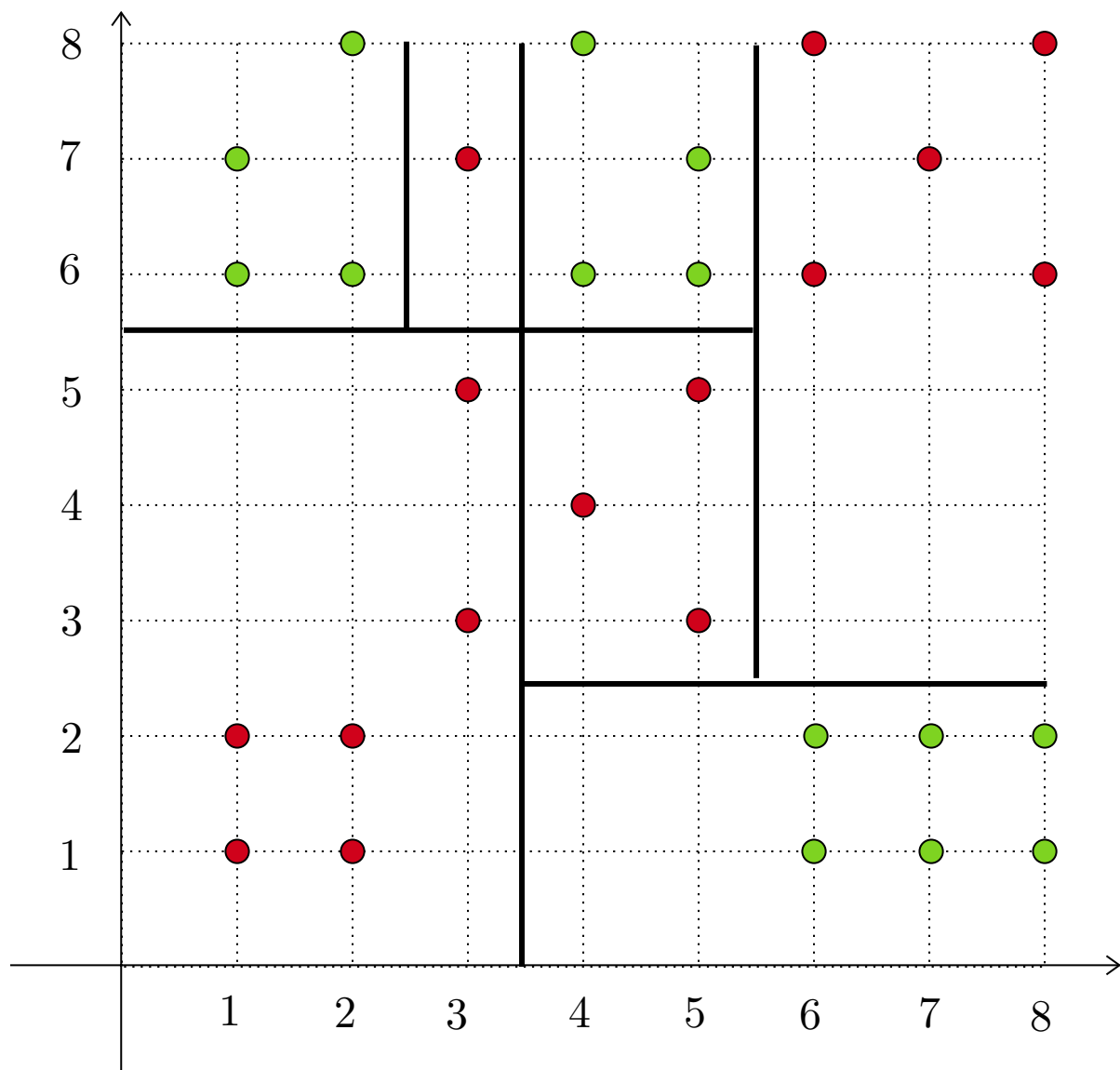
# Growing a Tree



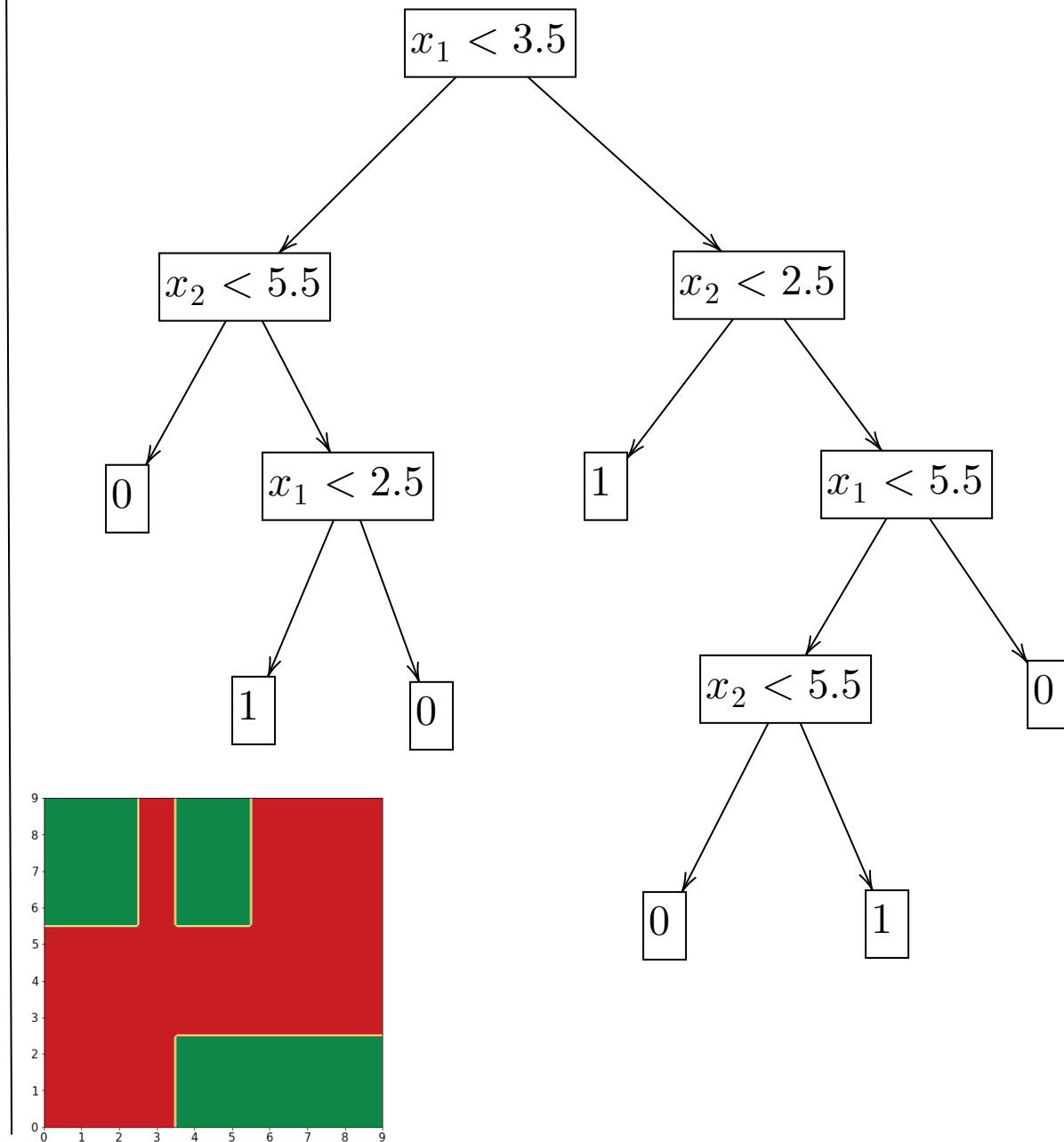
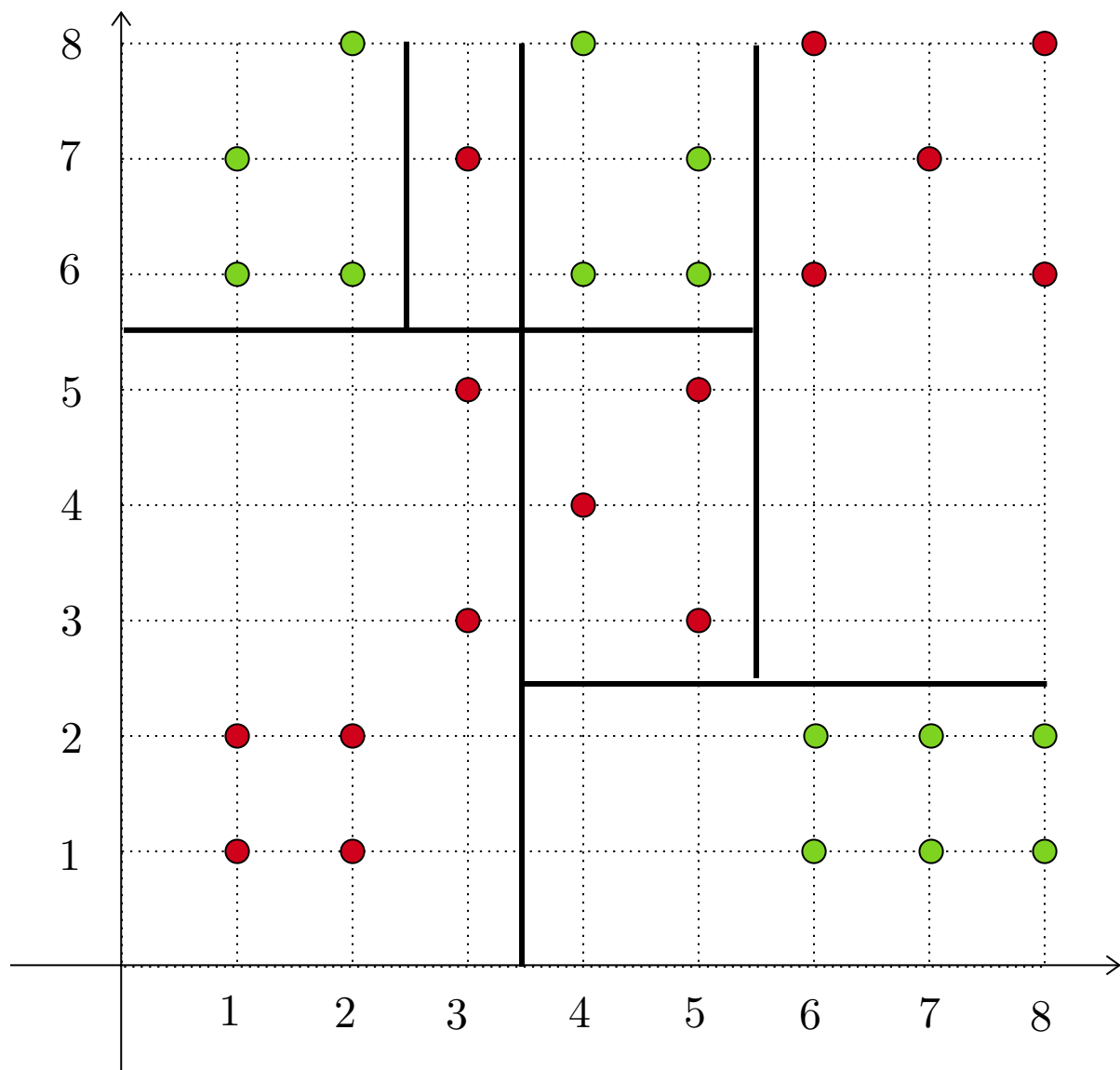
# Growing a Tree



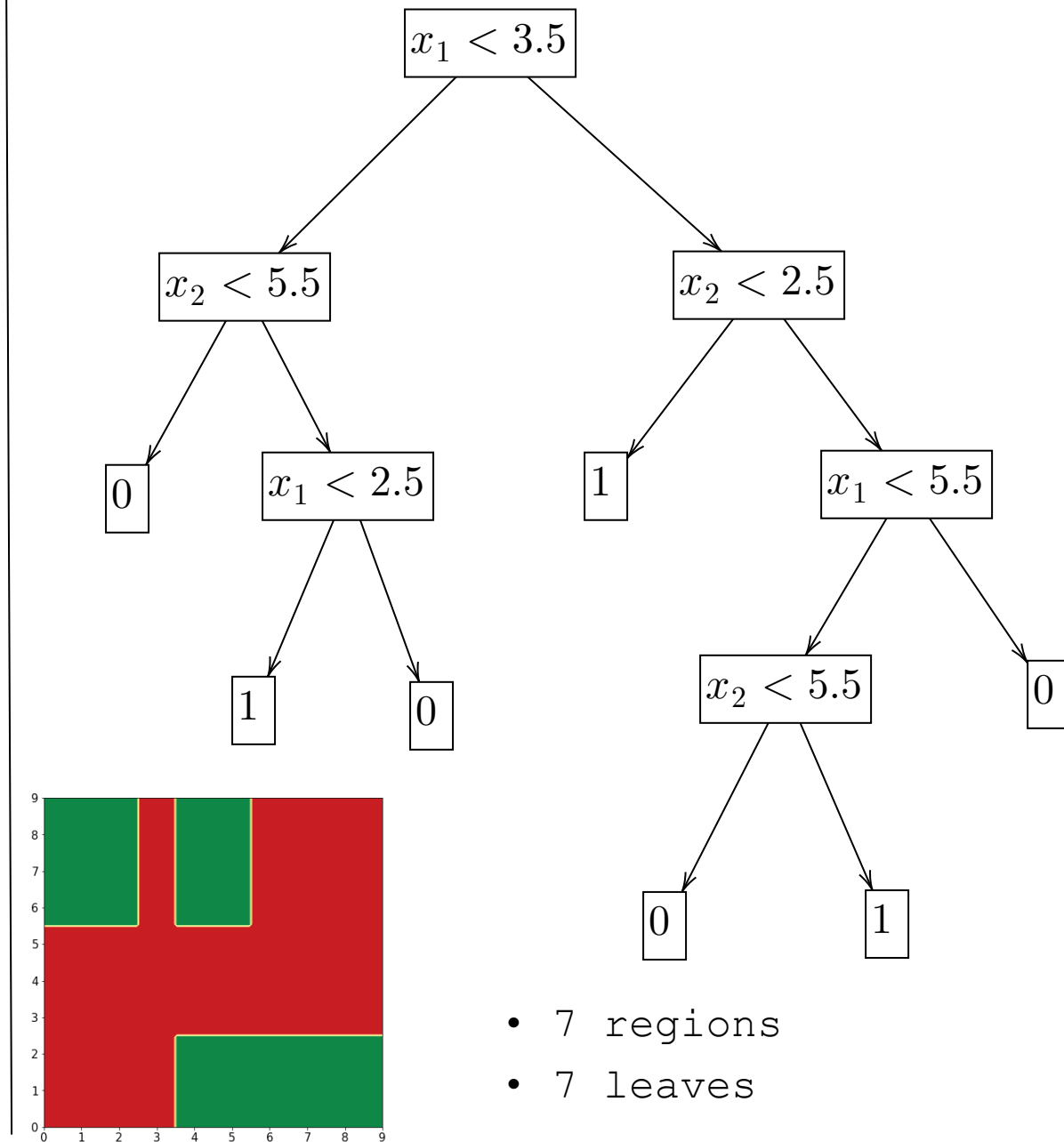
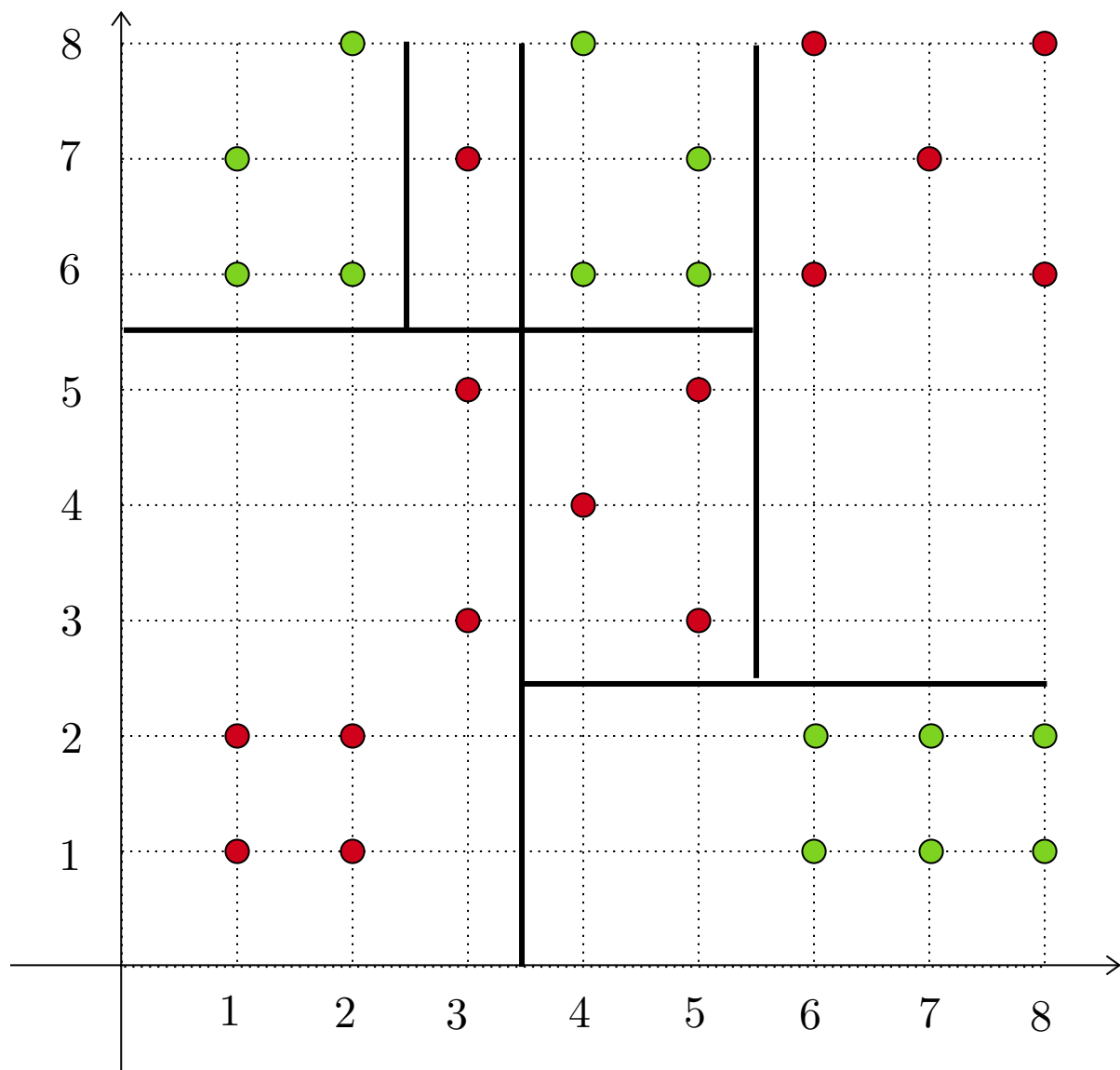
# Growing a Tree



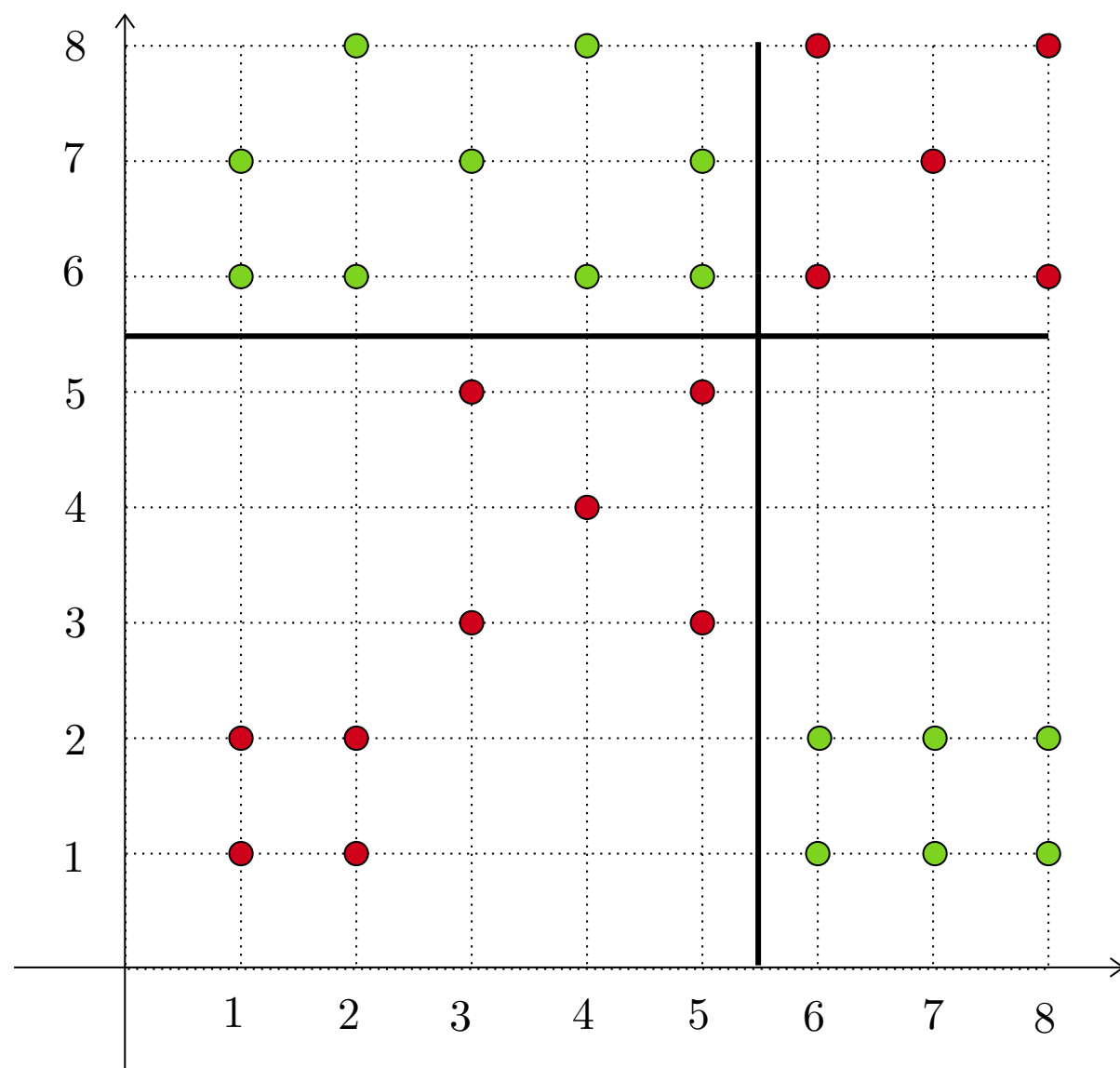
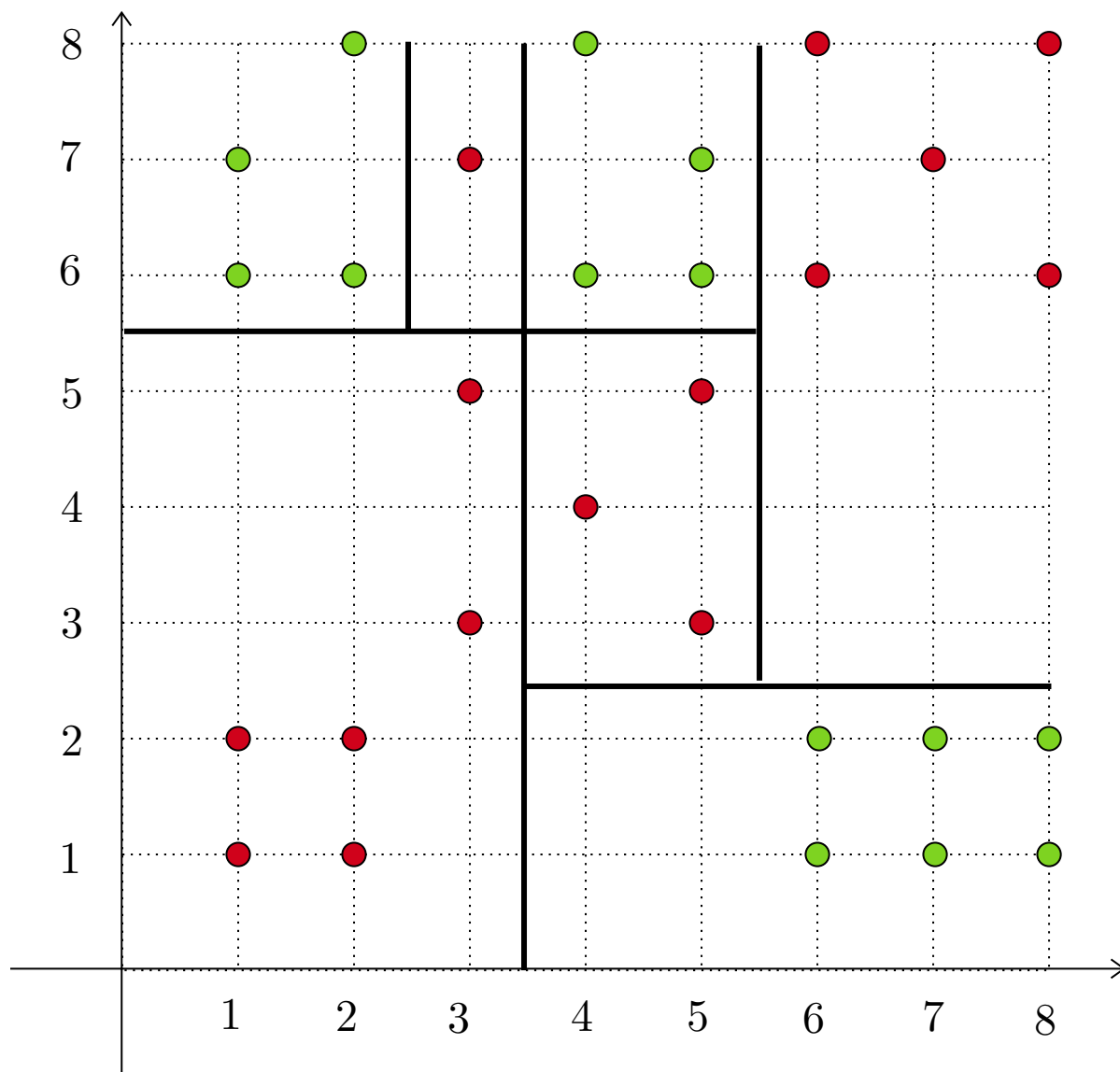
# Growing a Tree



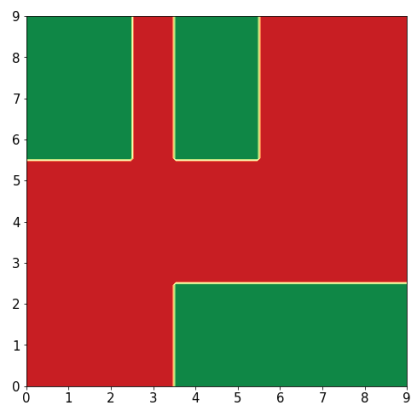
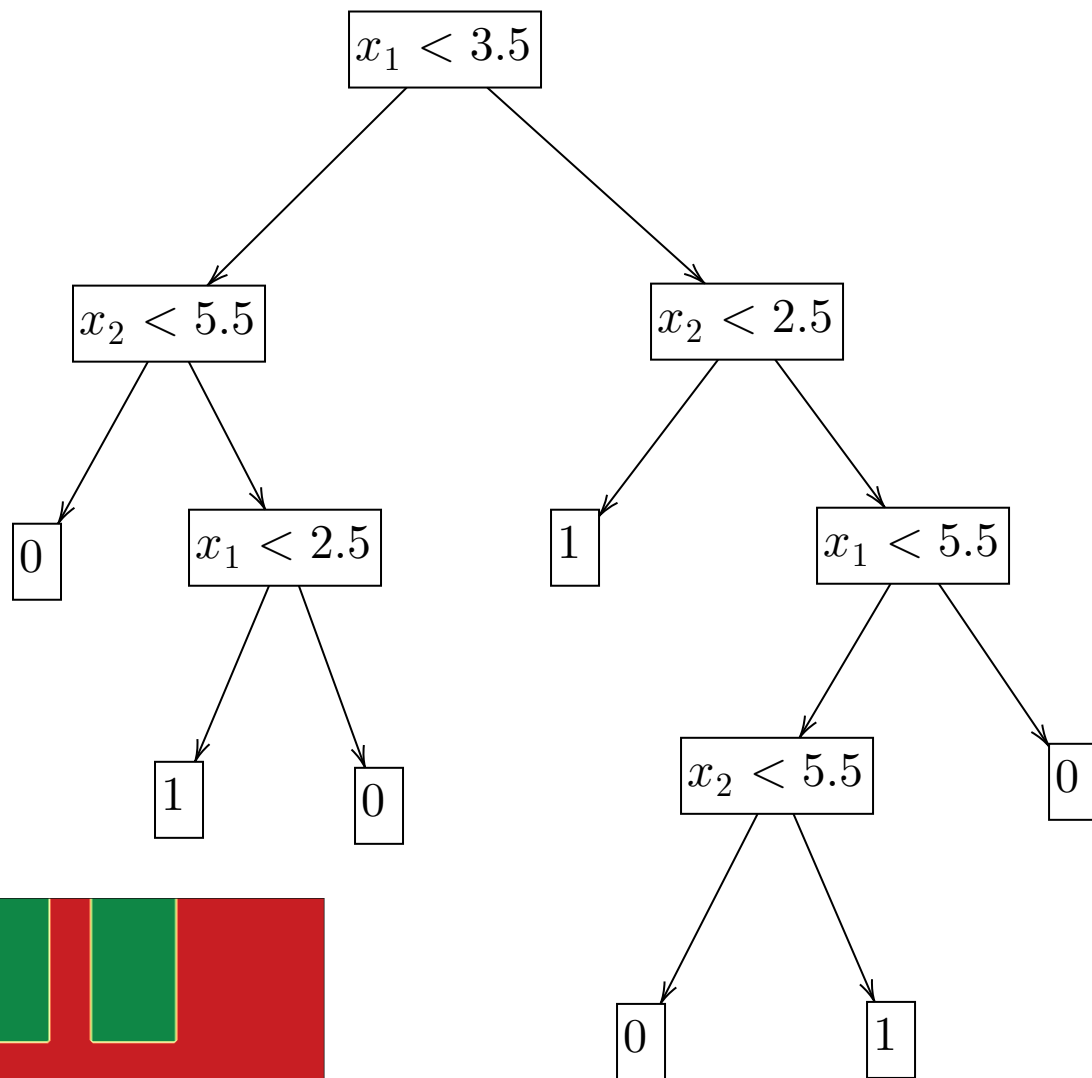
# Growing a Tree



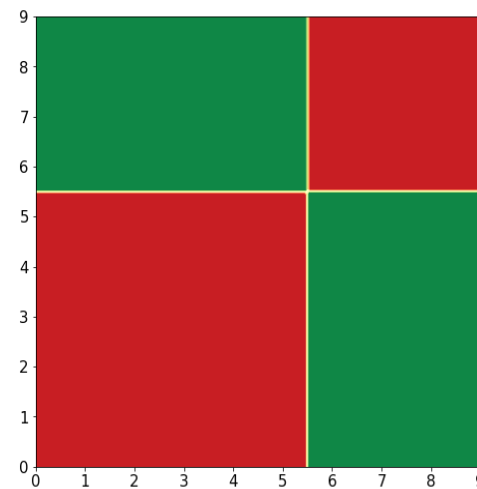
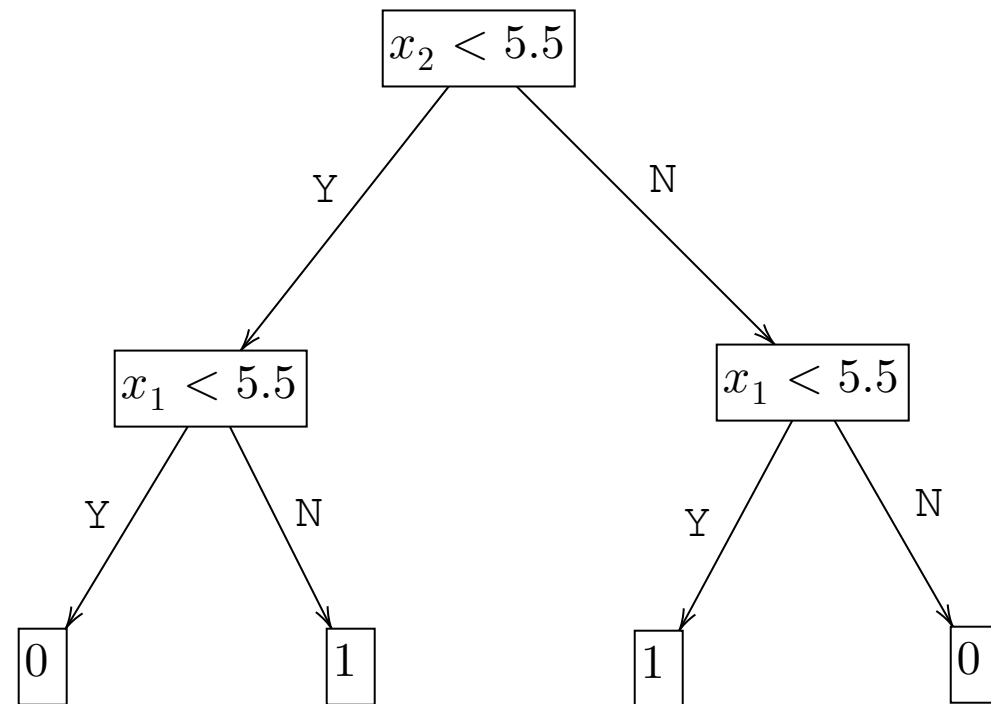
# Growing a Tree







- 7 regions
- 7 leaves



- 4 regions
- 4 leaves

Thank you

