Lecture

Frank Wood

July 2, 2010

Introduction

Overview of Topics

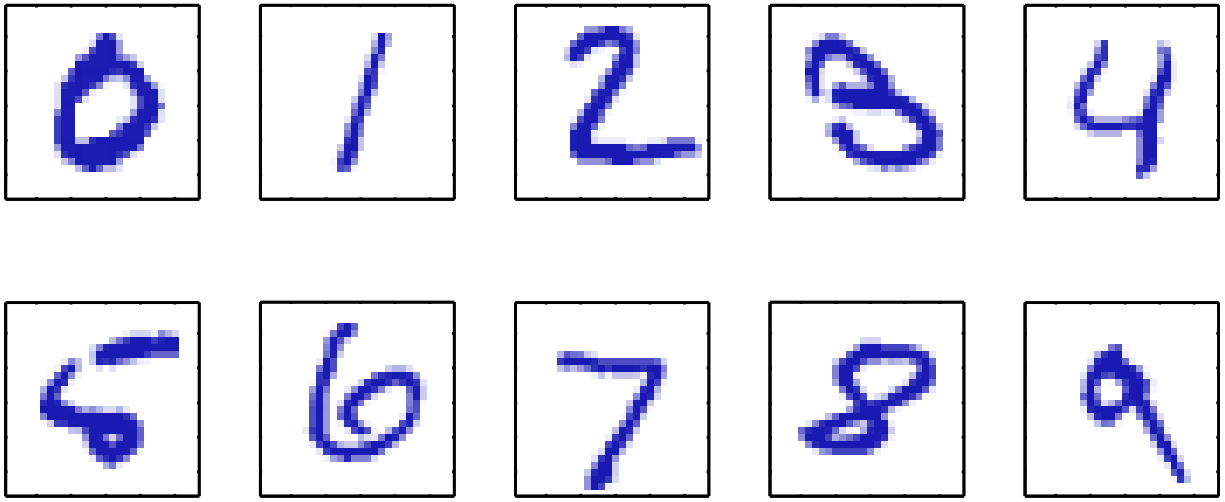
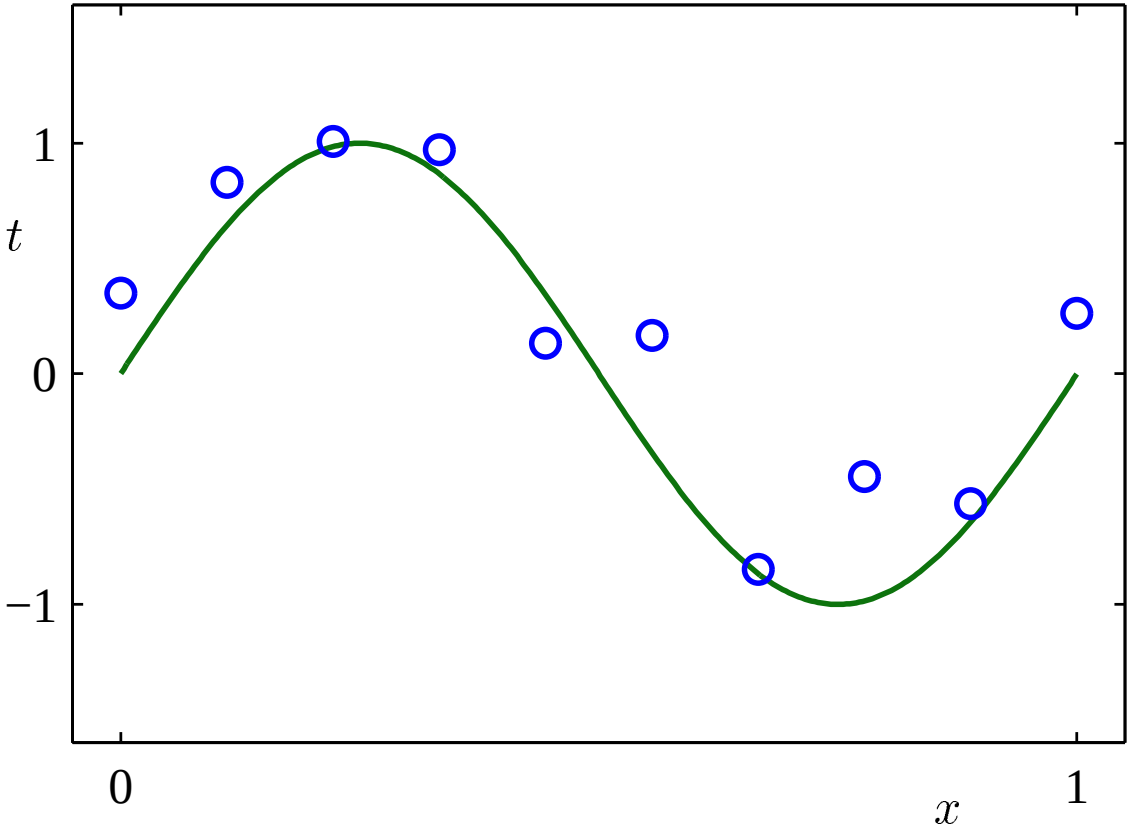


Figure: Chapter 1, Figure 1



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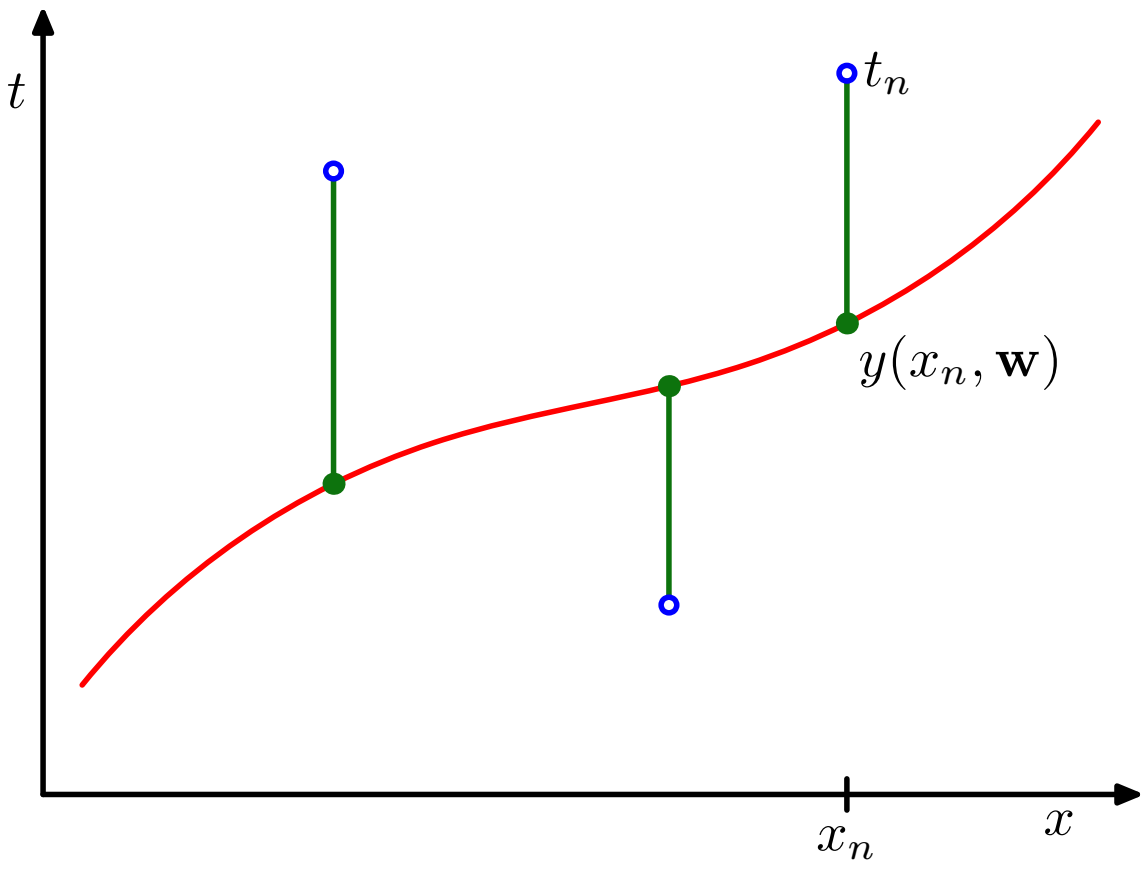

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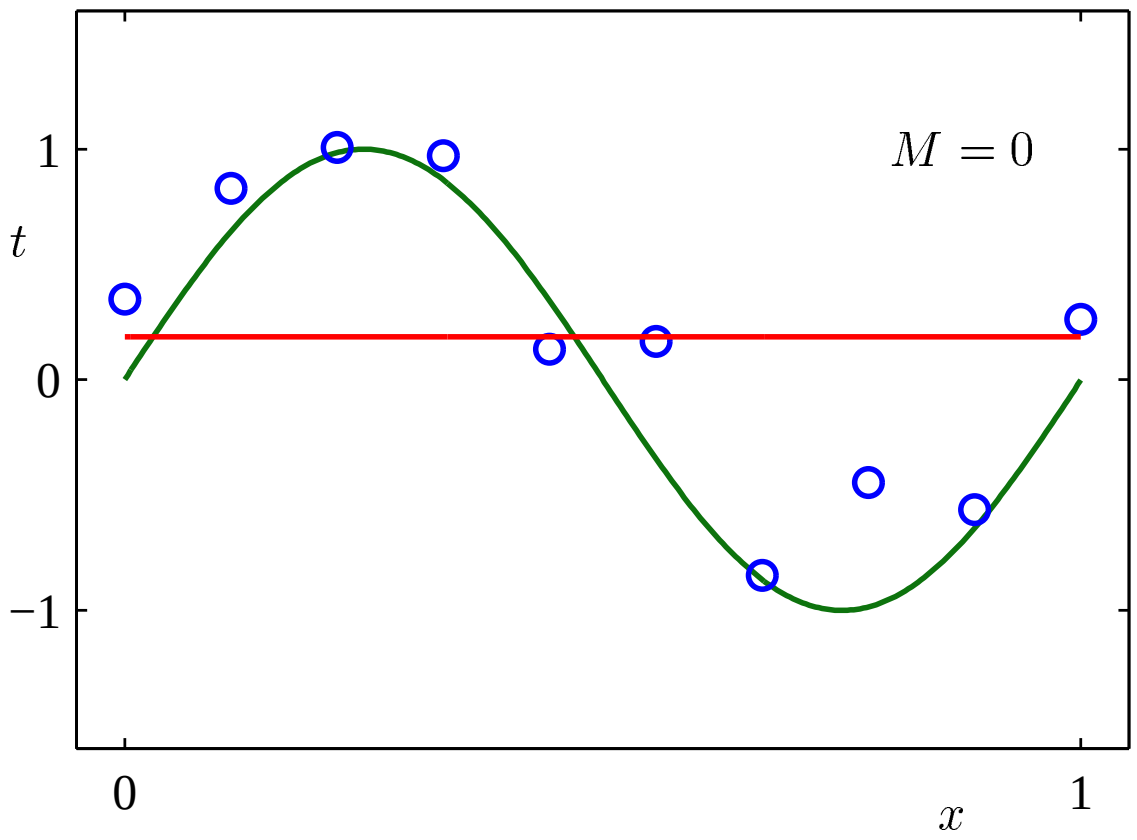

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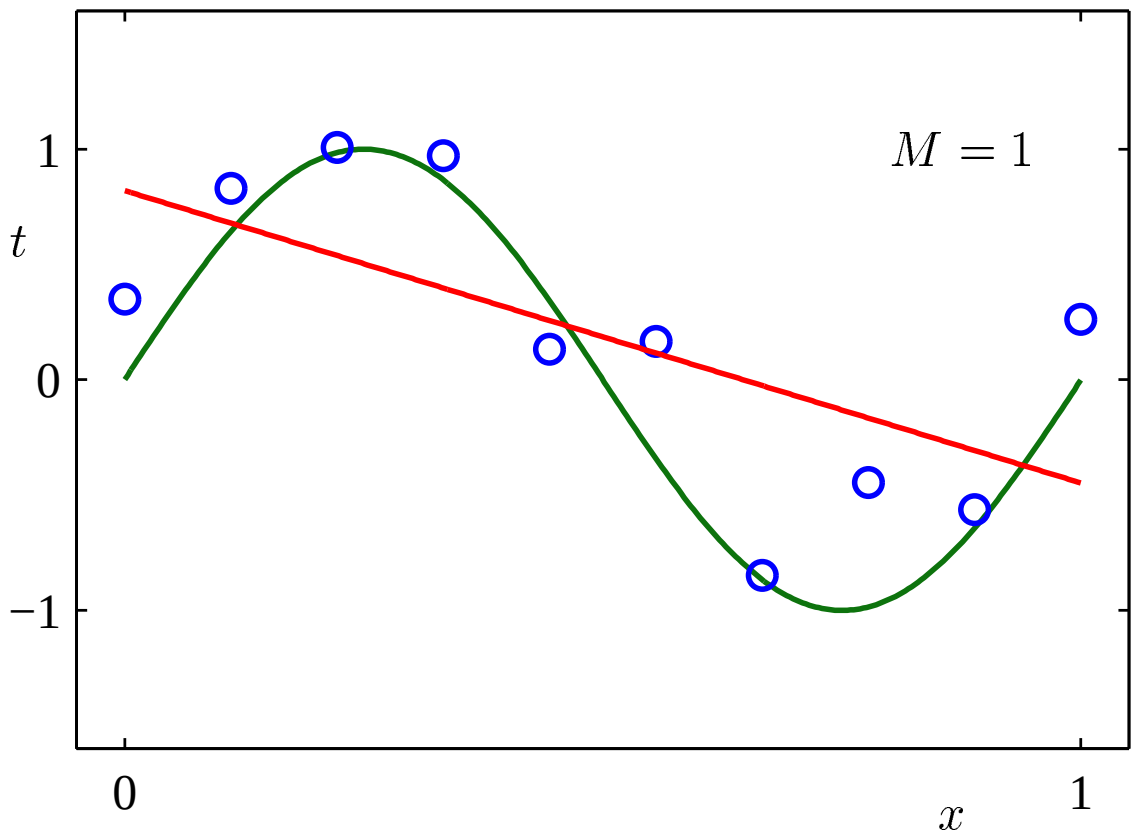

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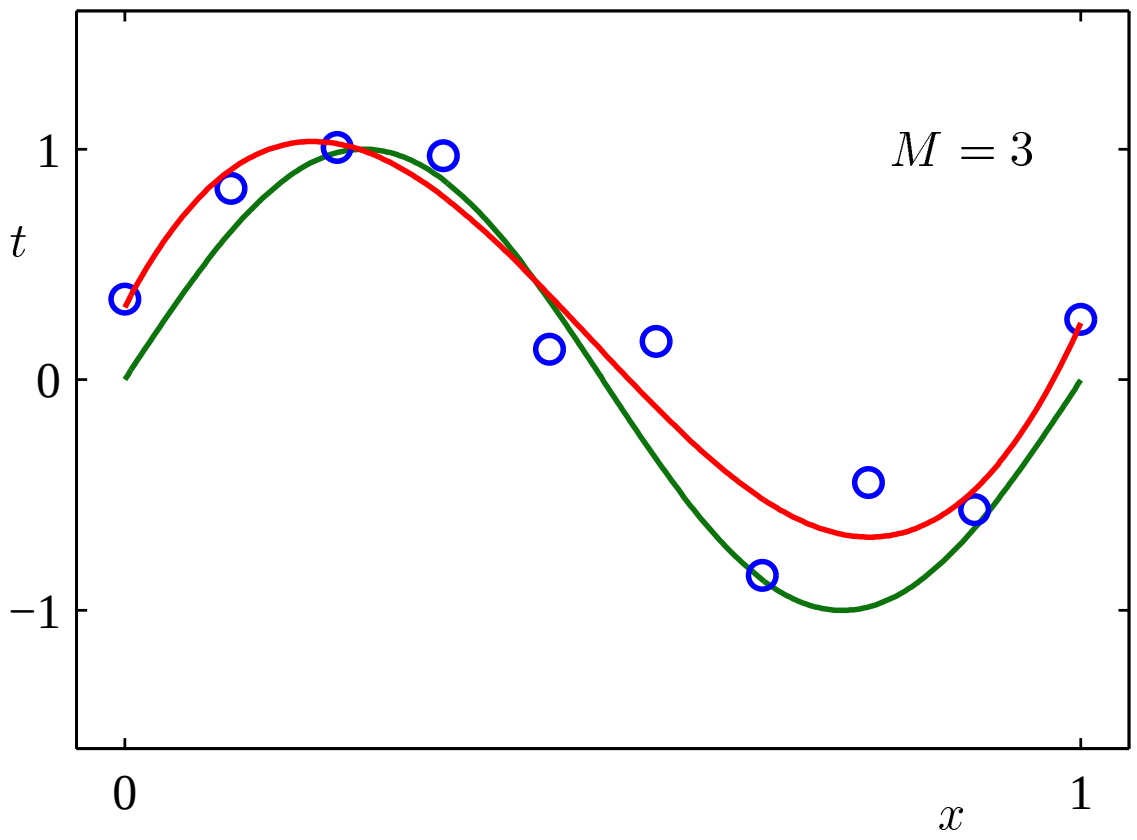

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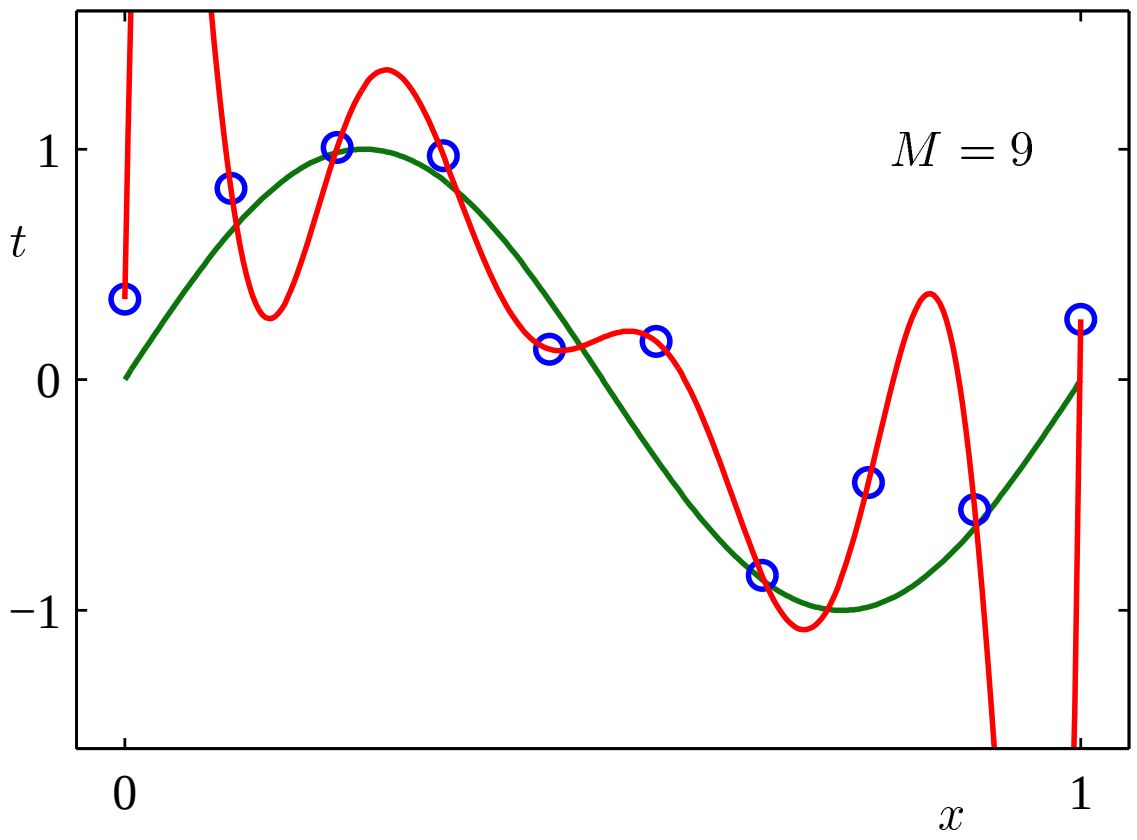

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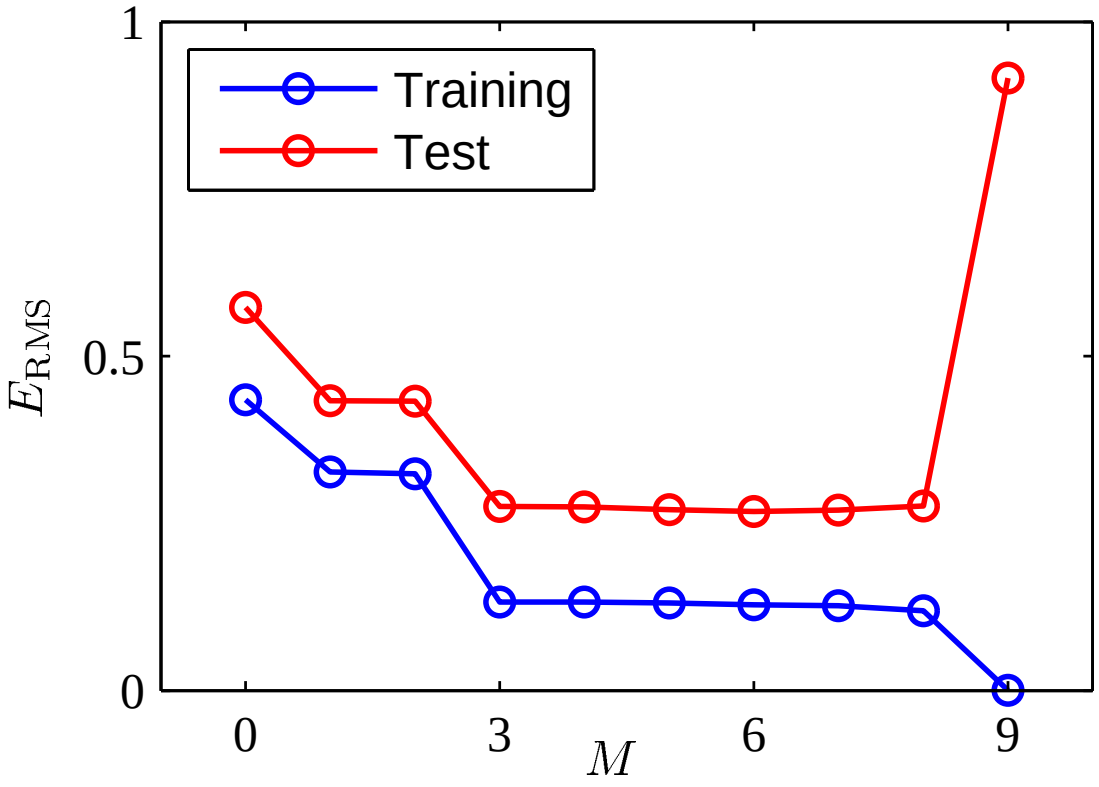

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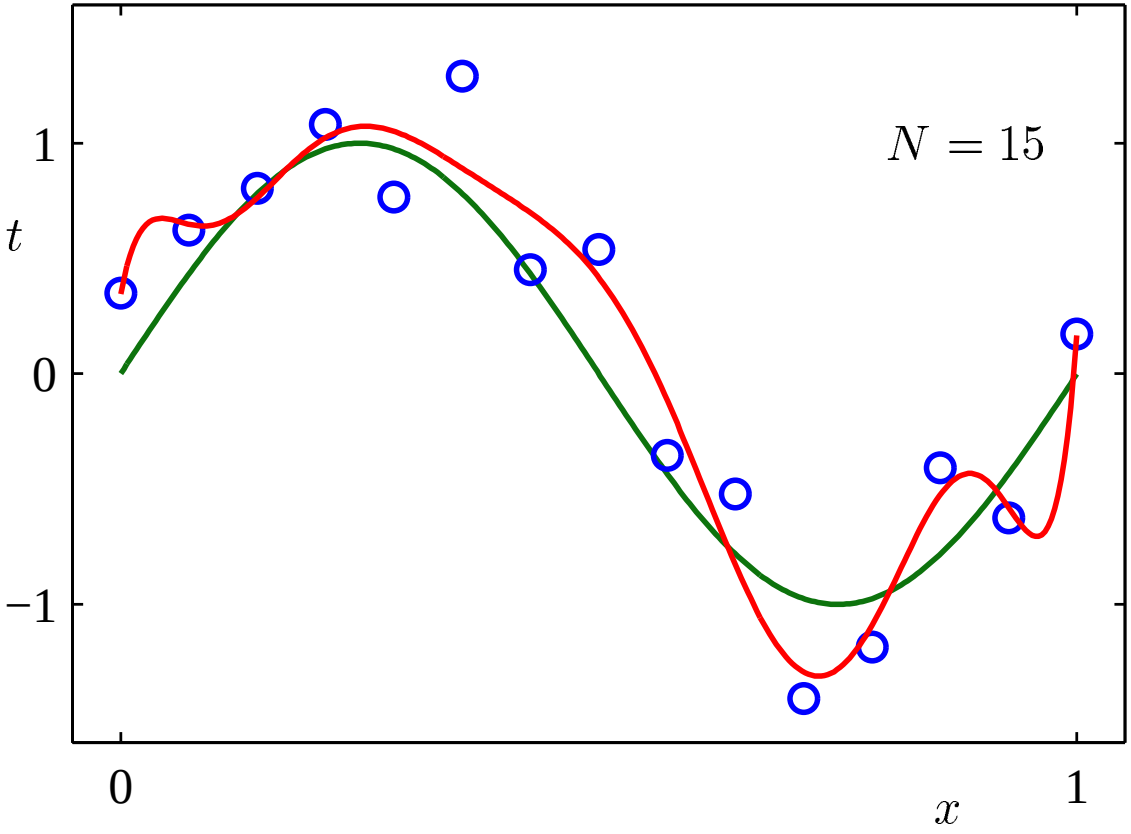

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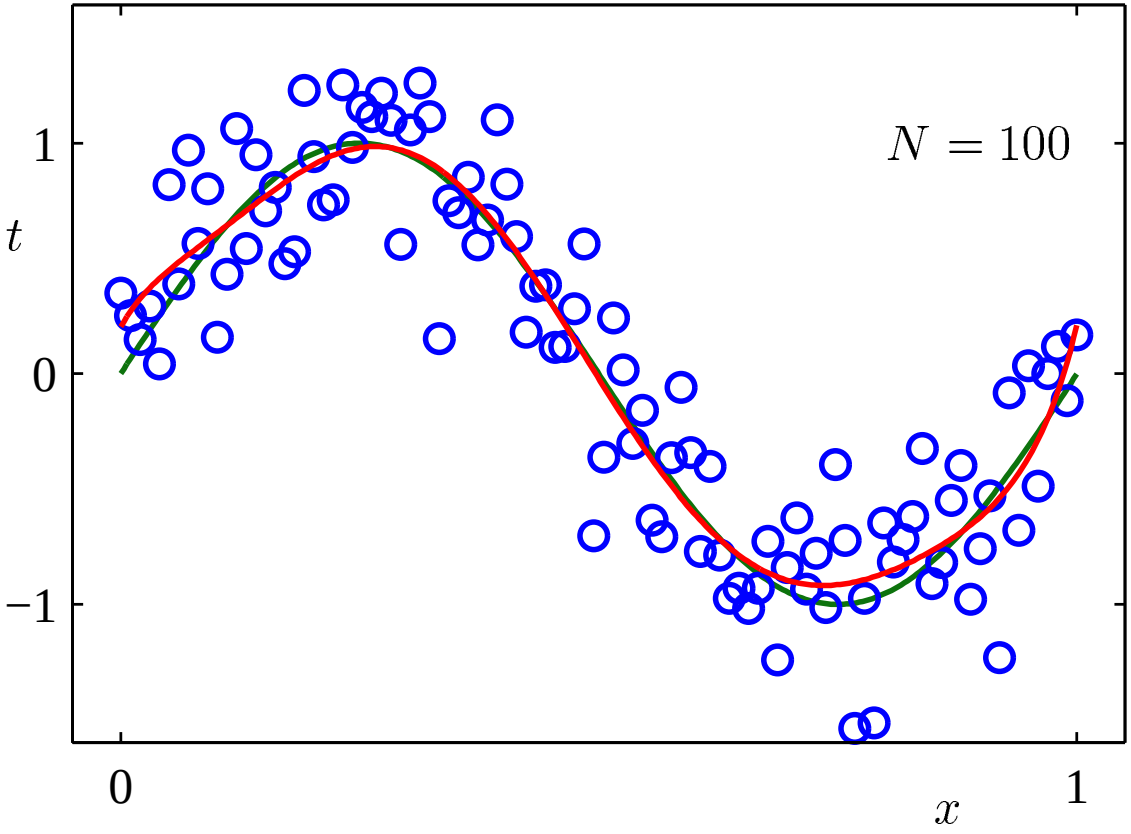

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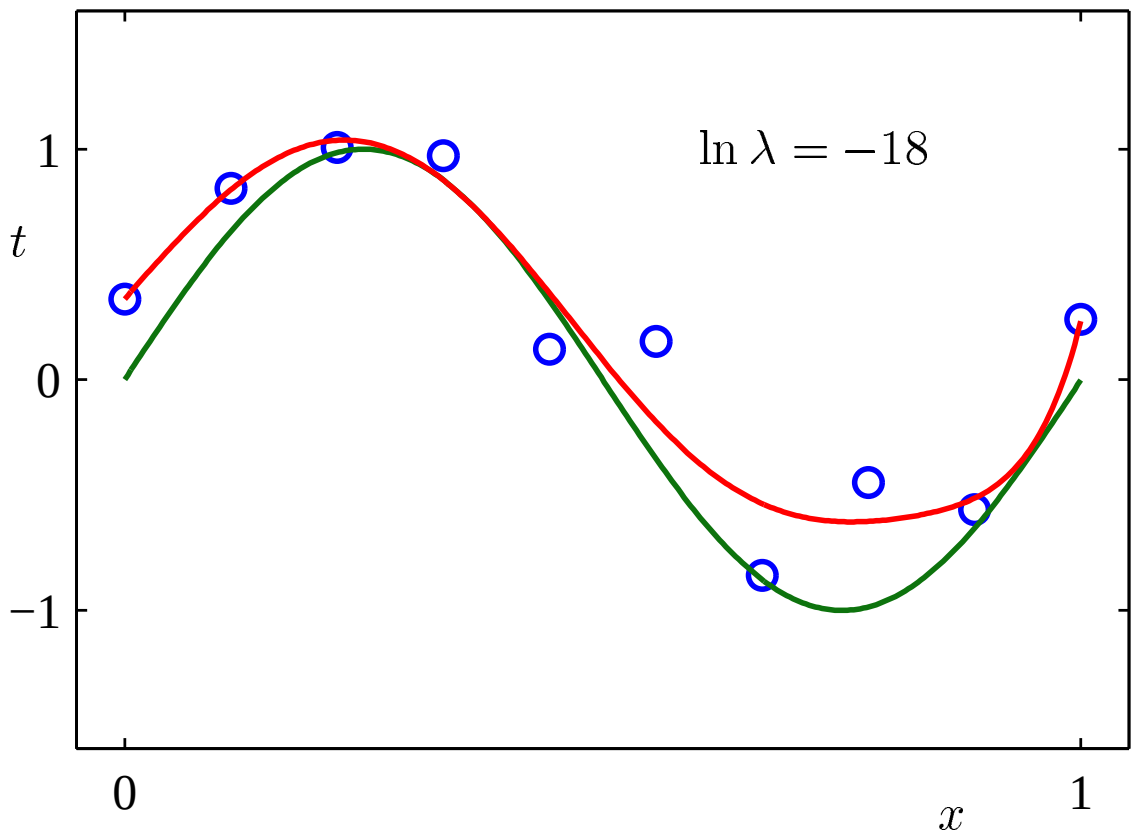

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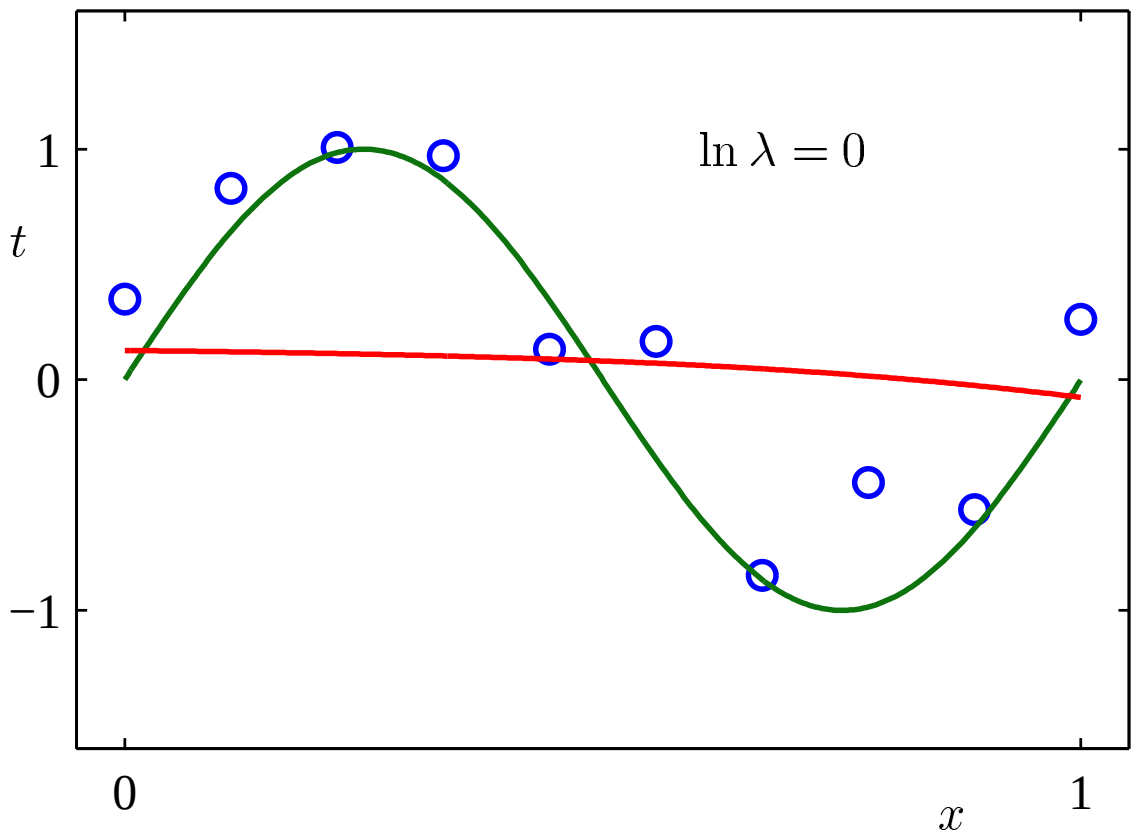

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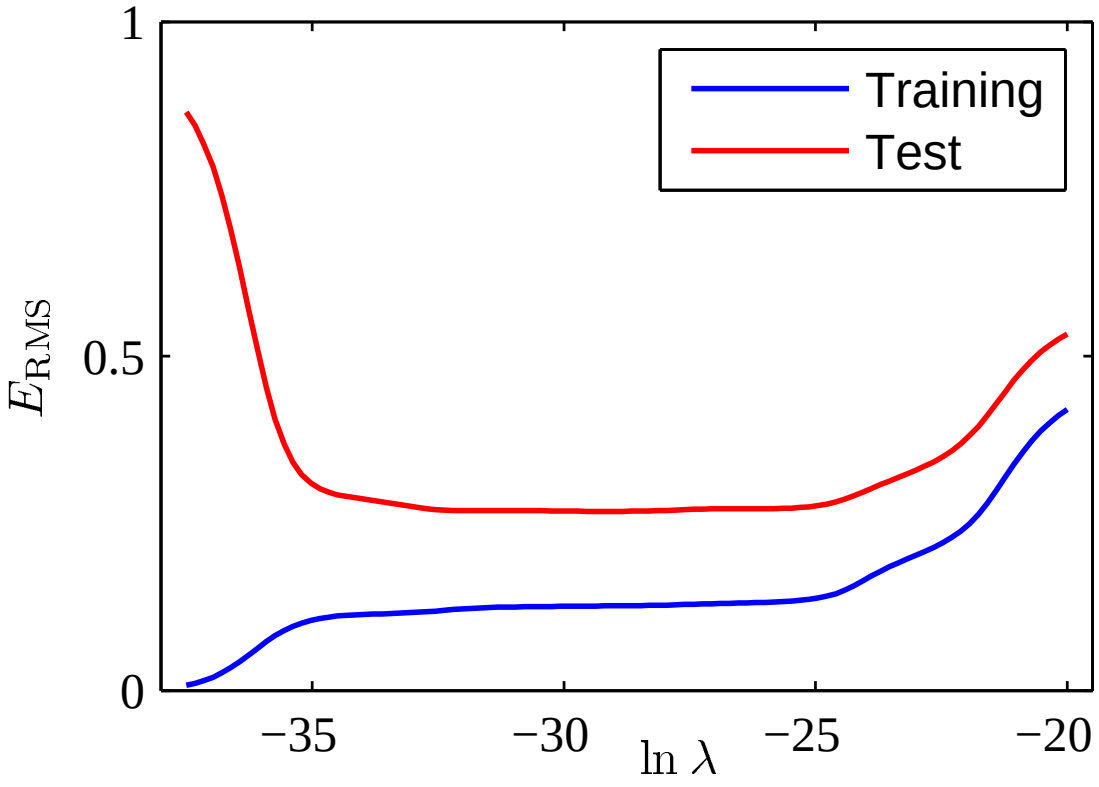

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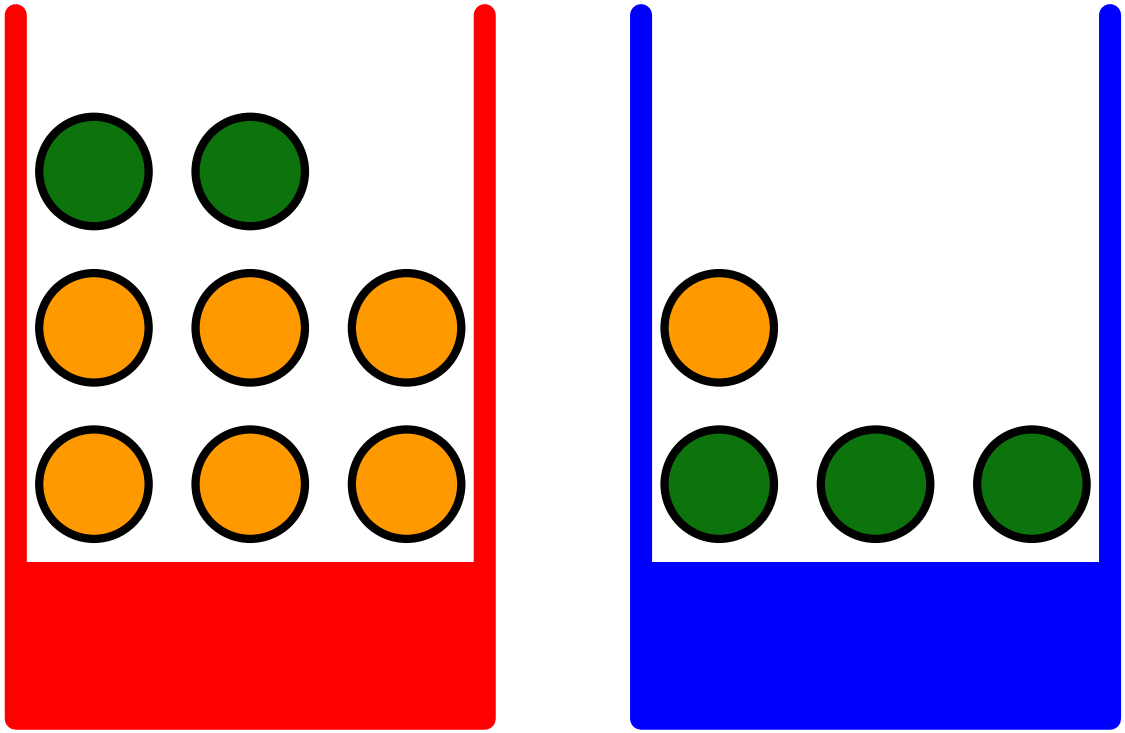

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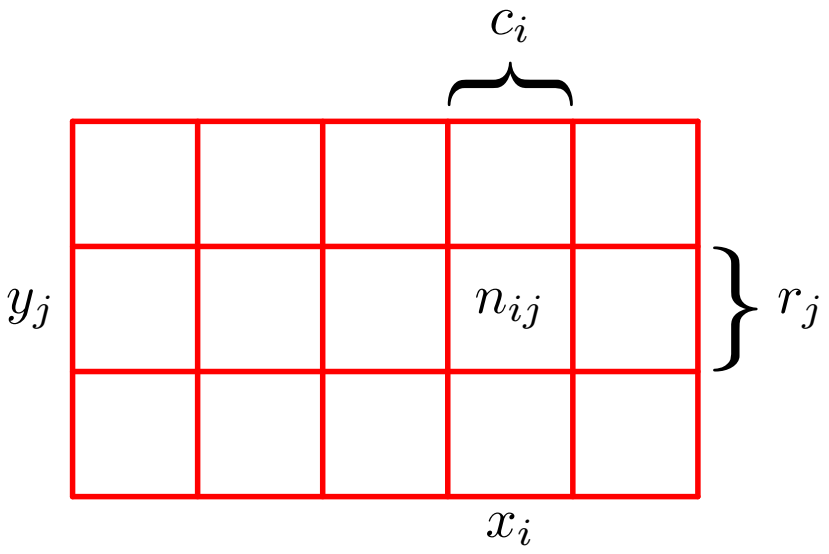

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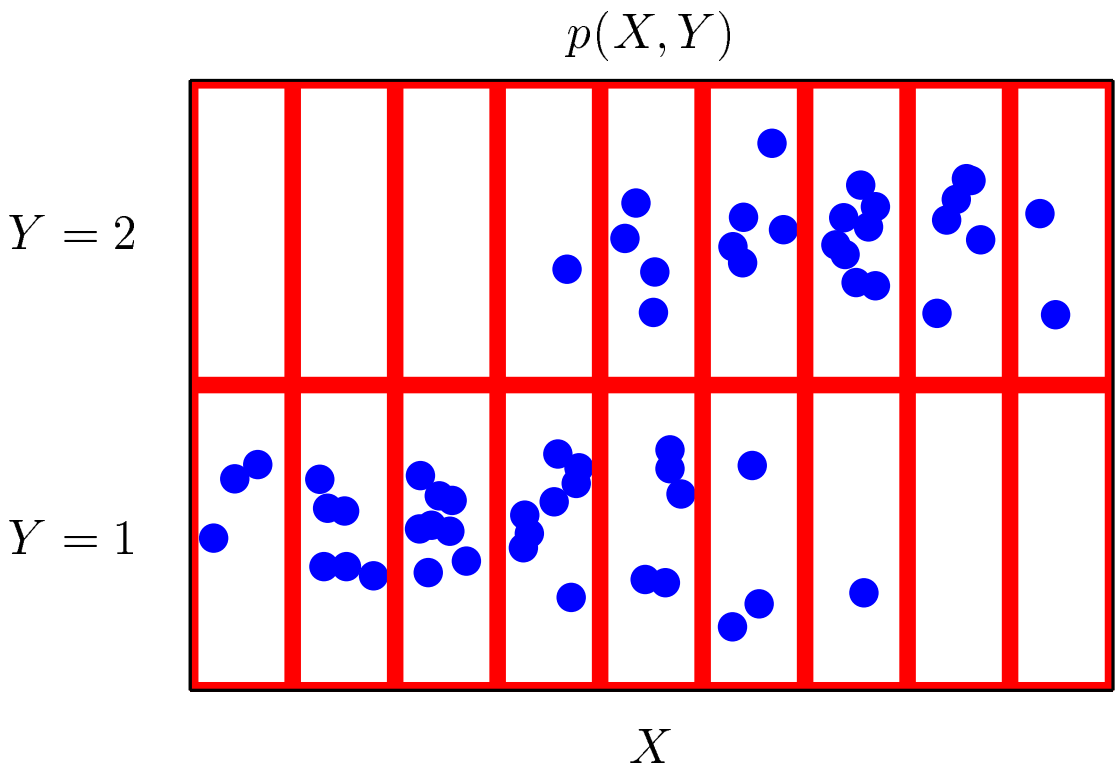

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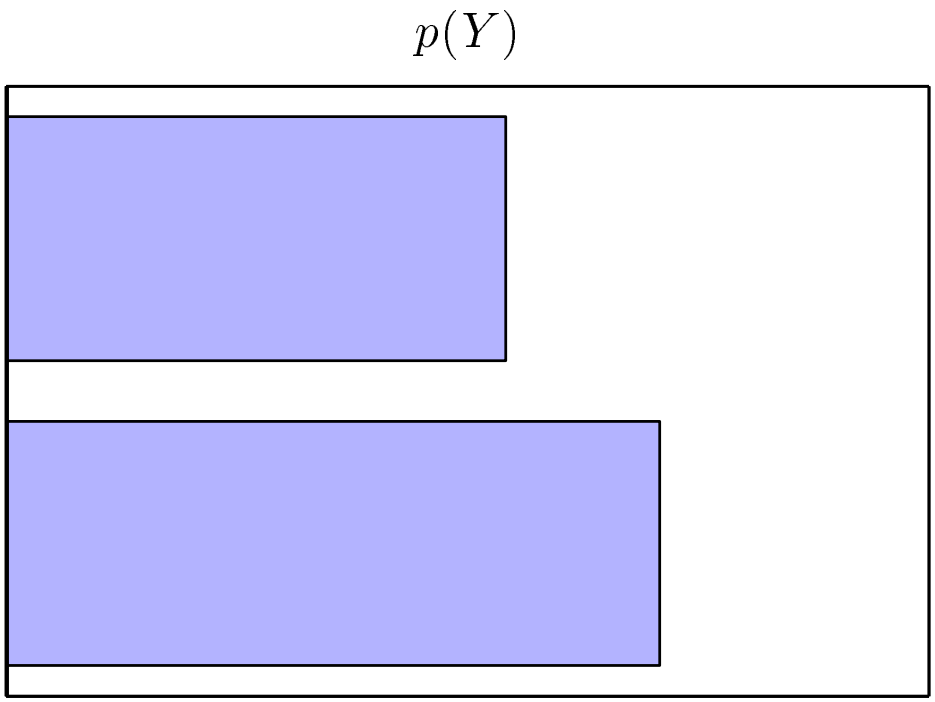

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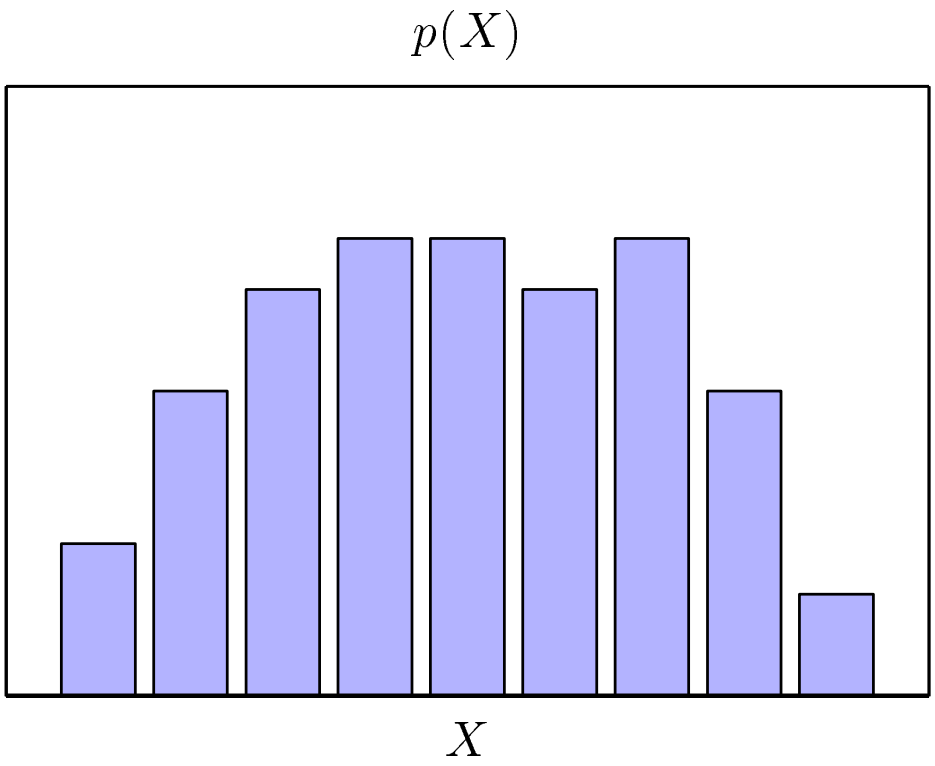

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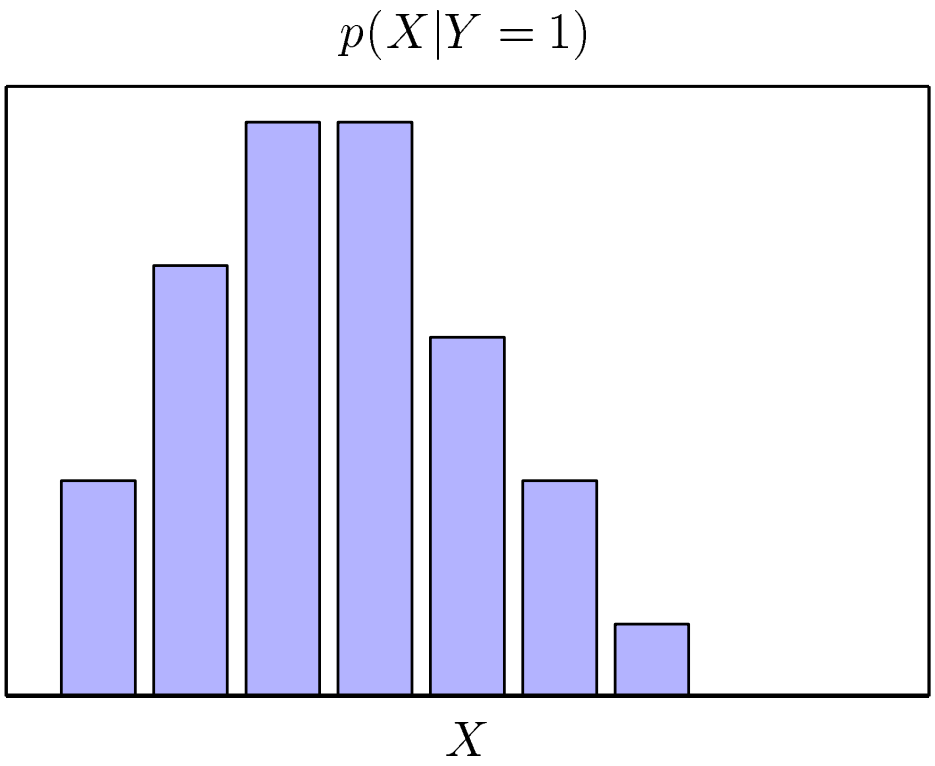

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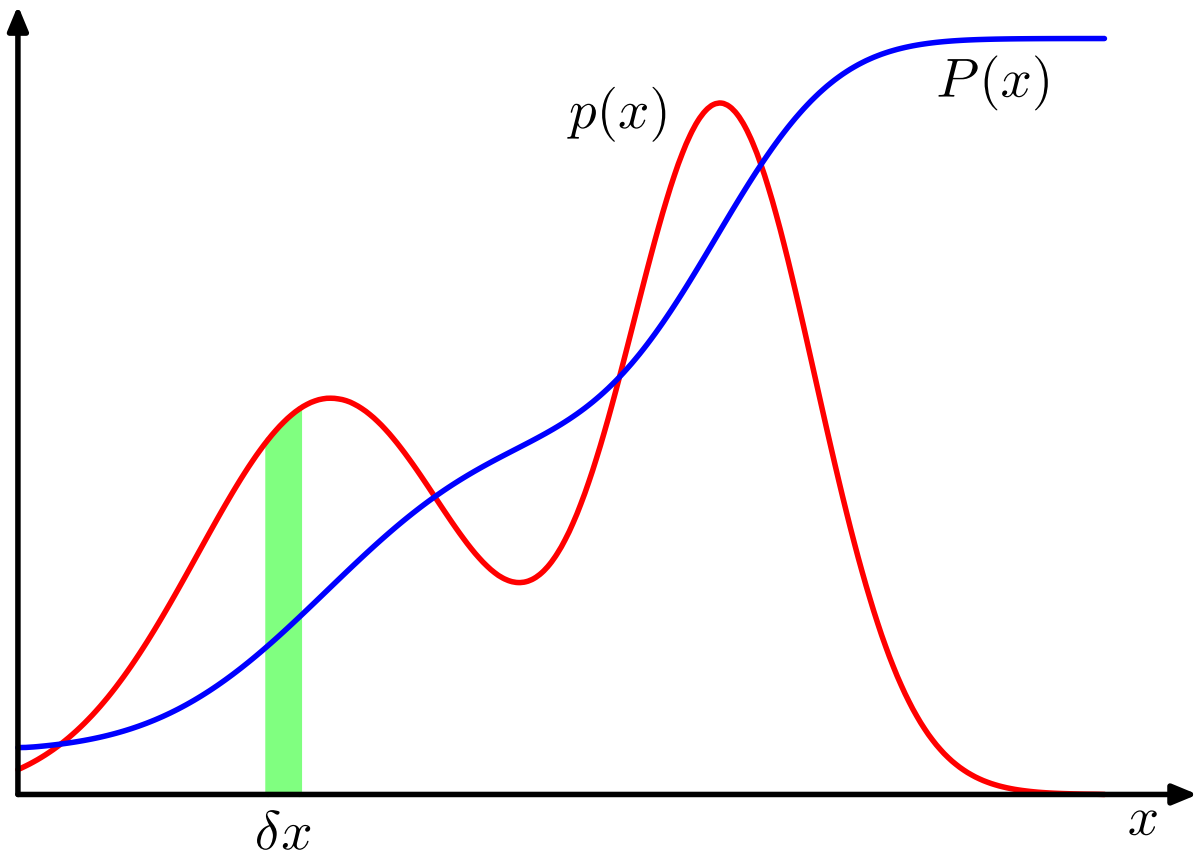

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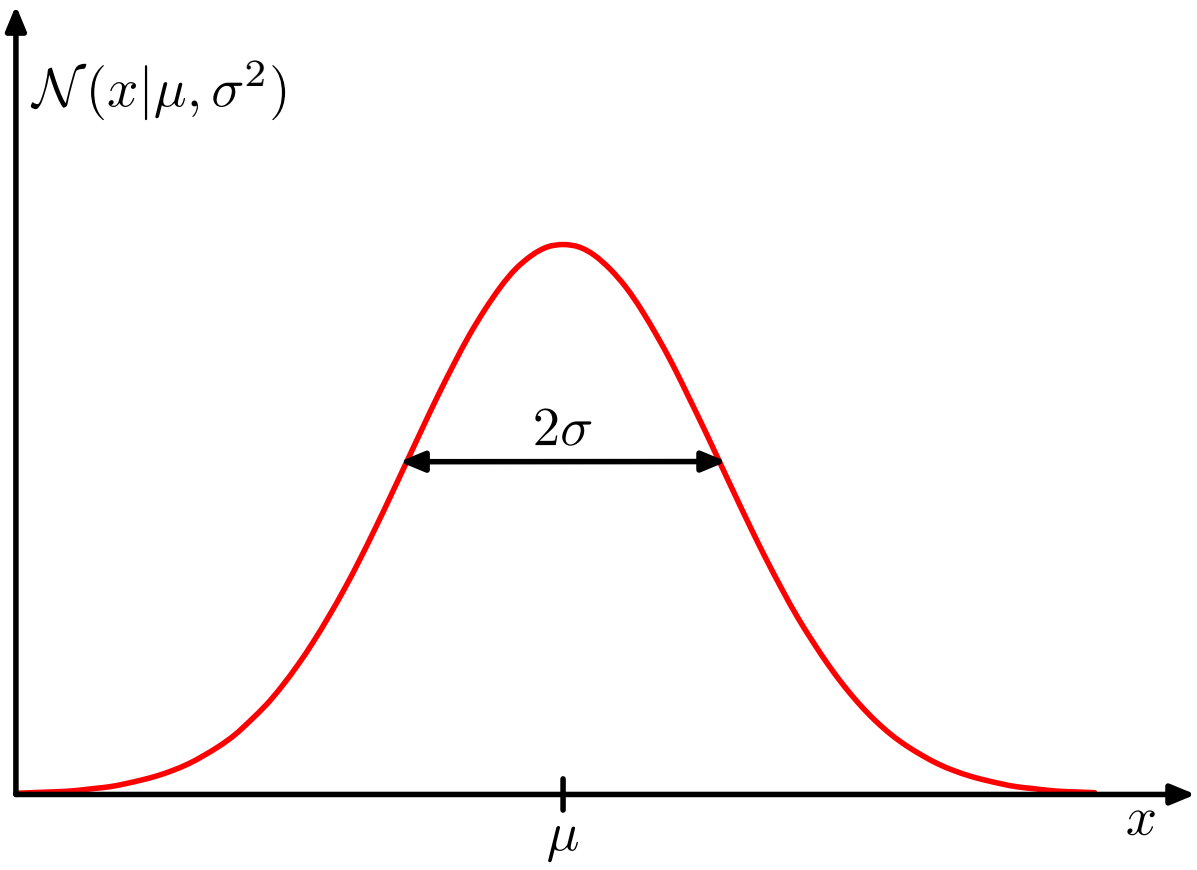

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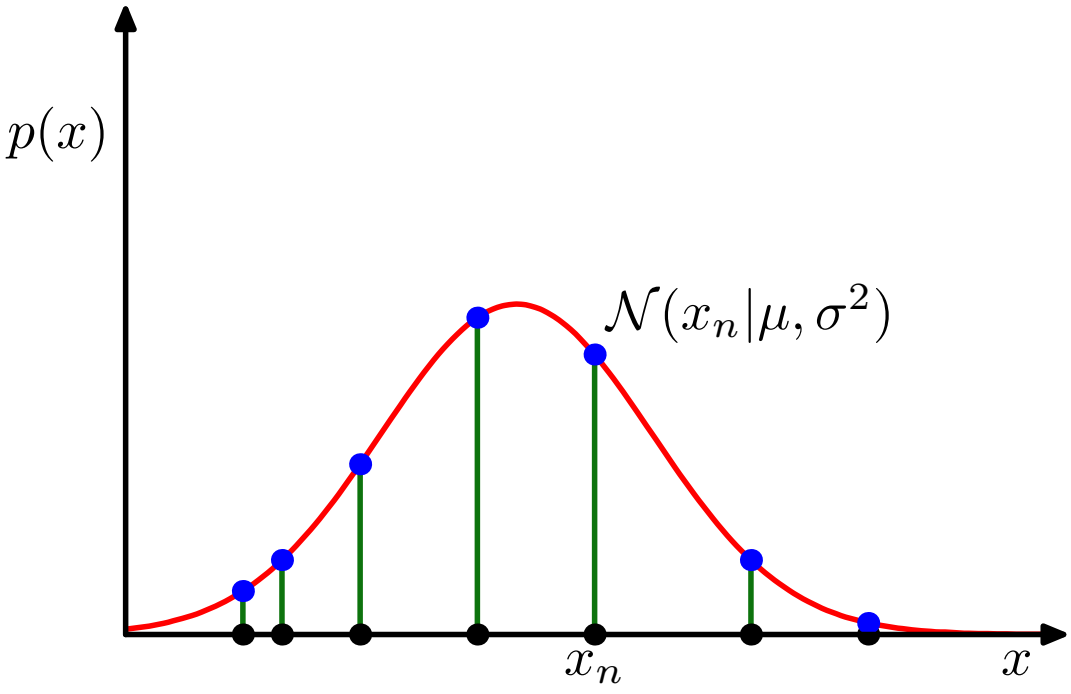

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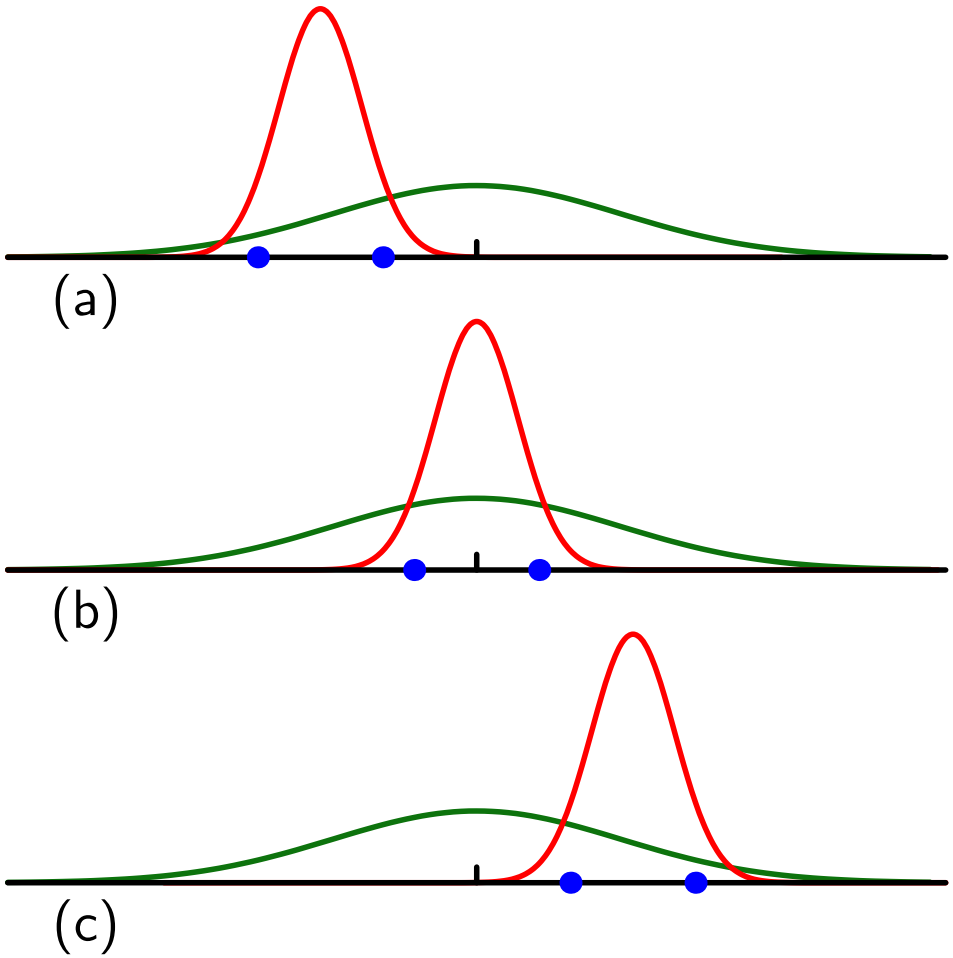

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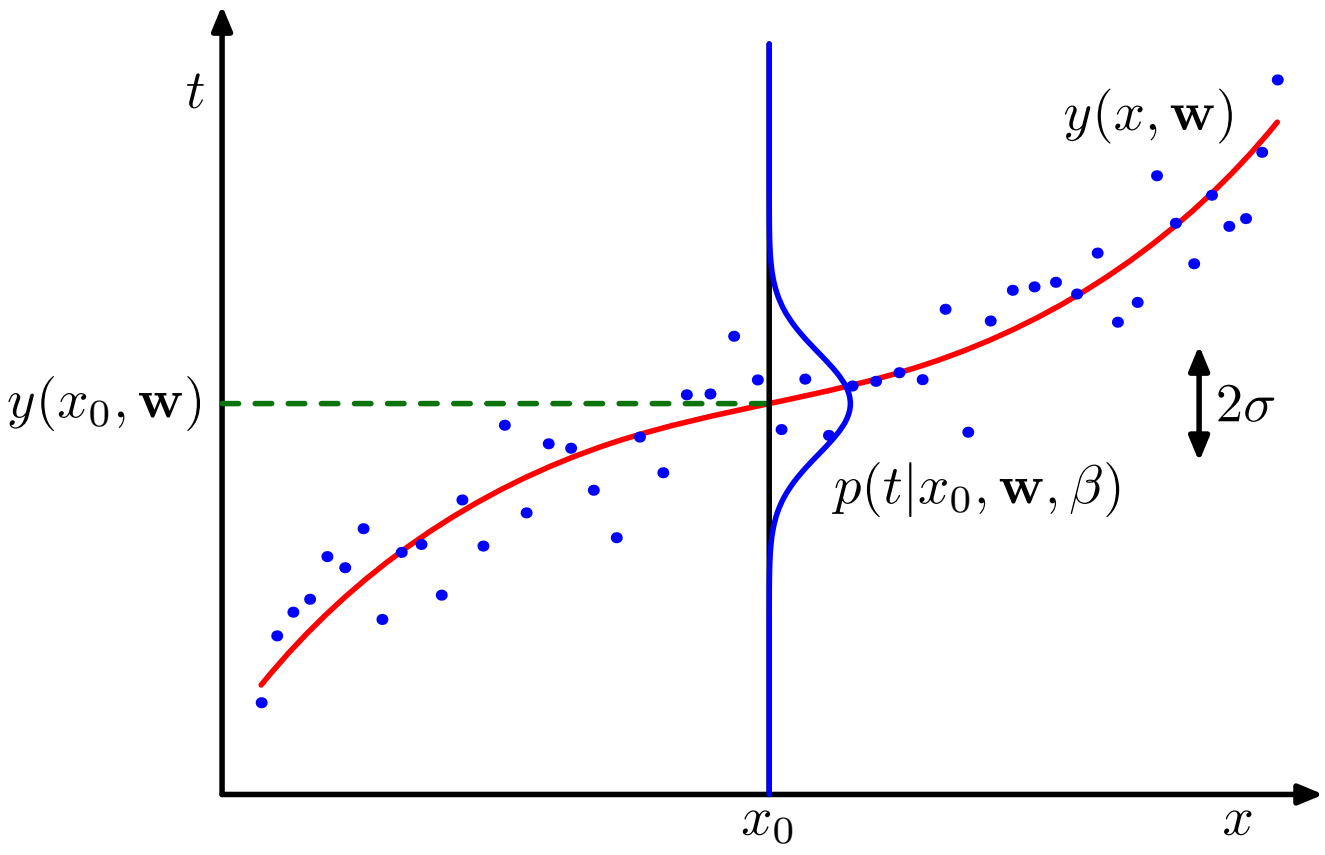

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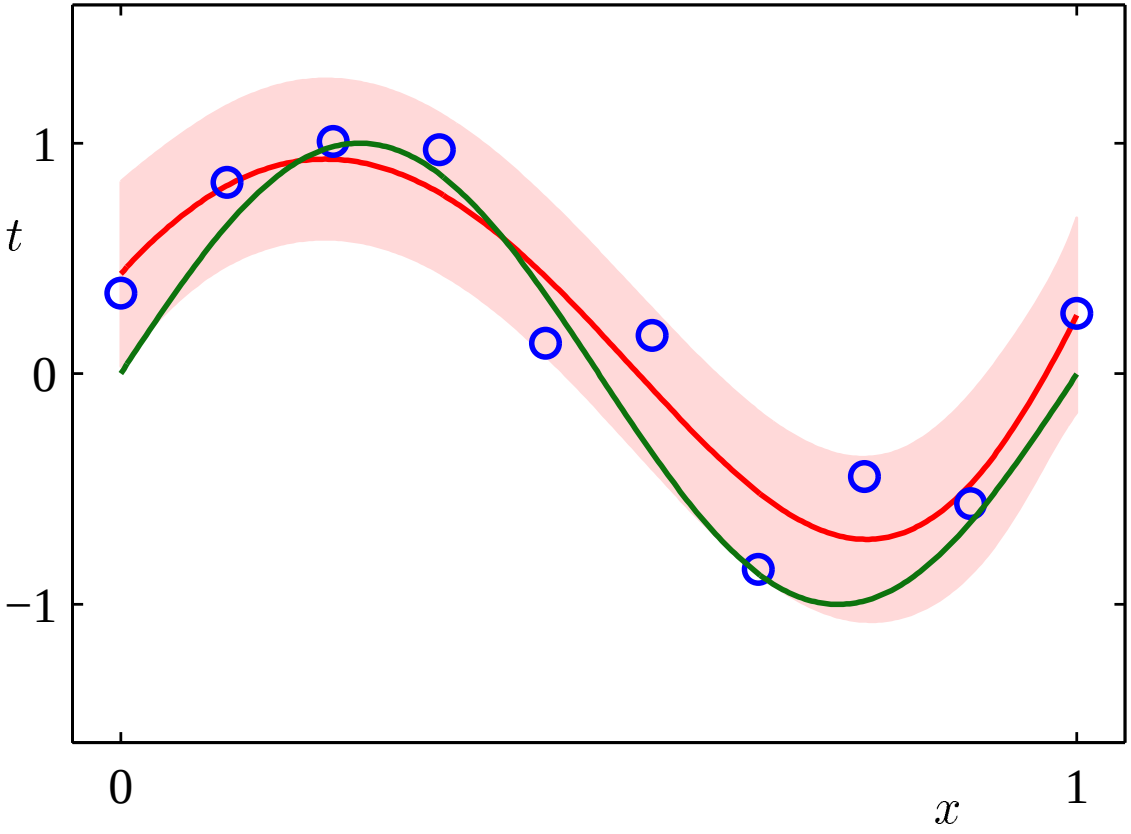

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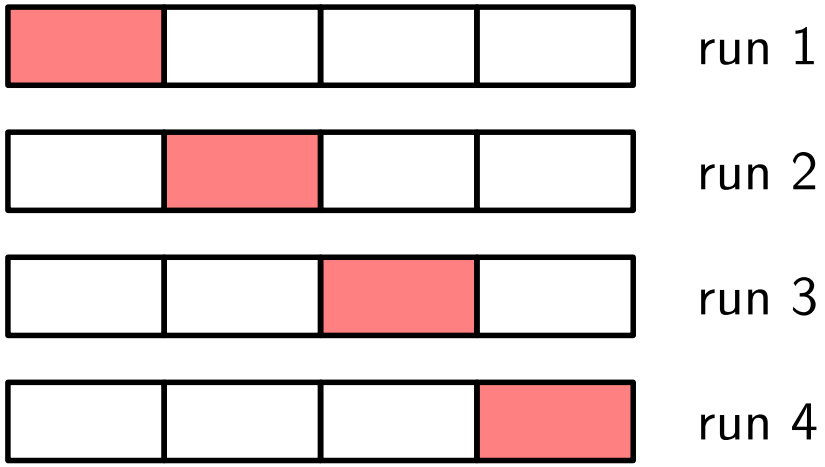

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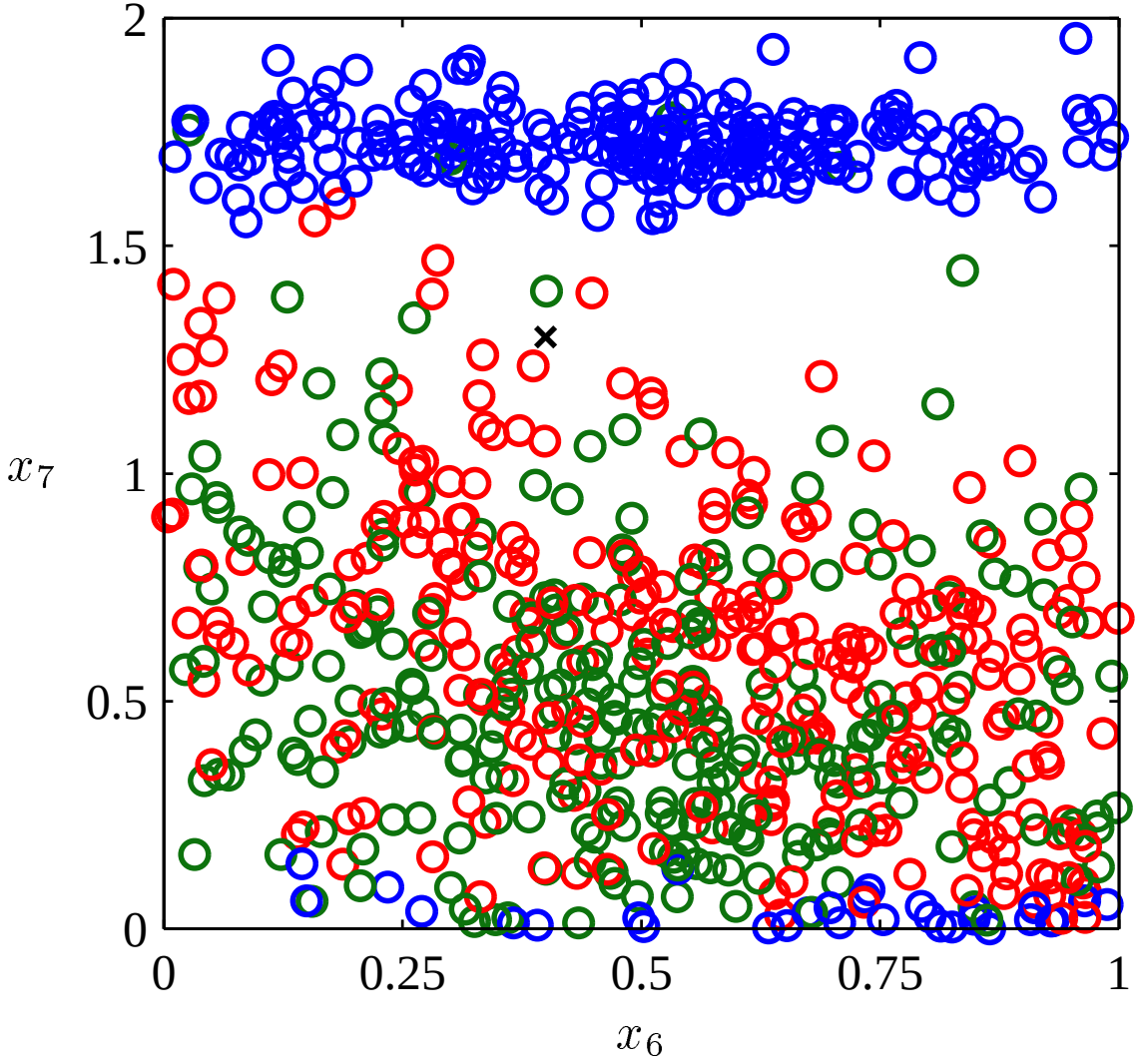

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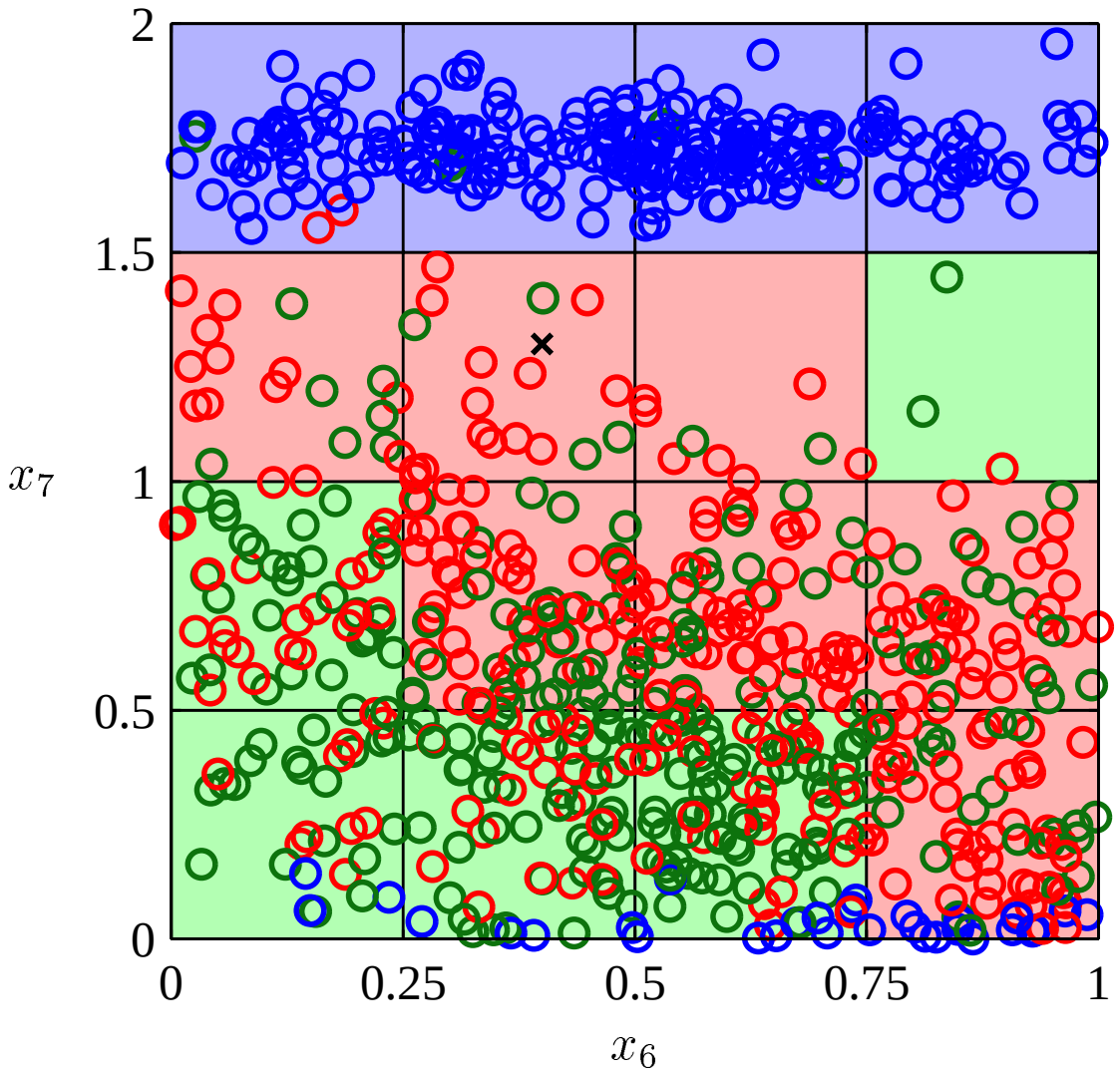

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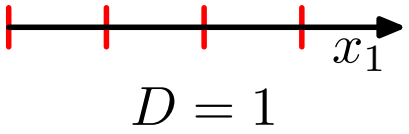

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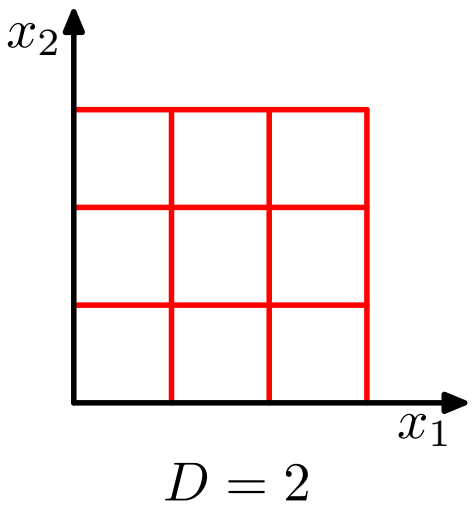

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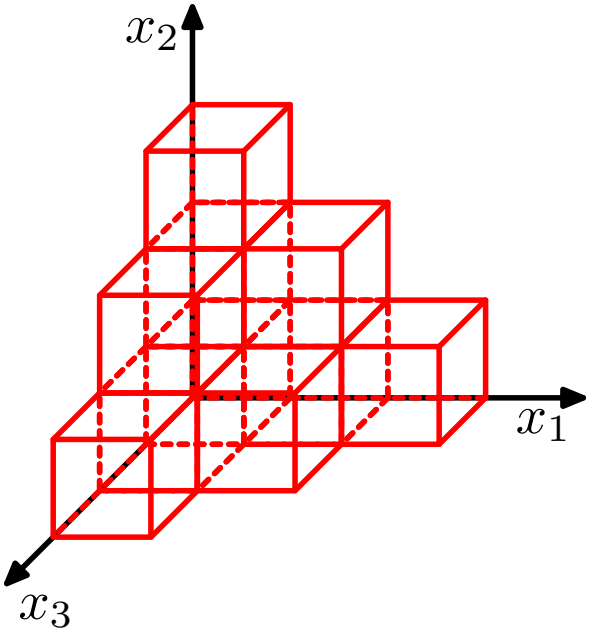

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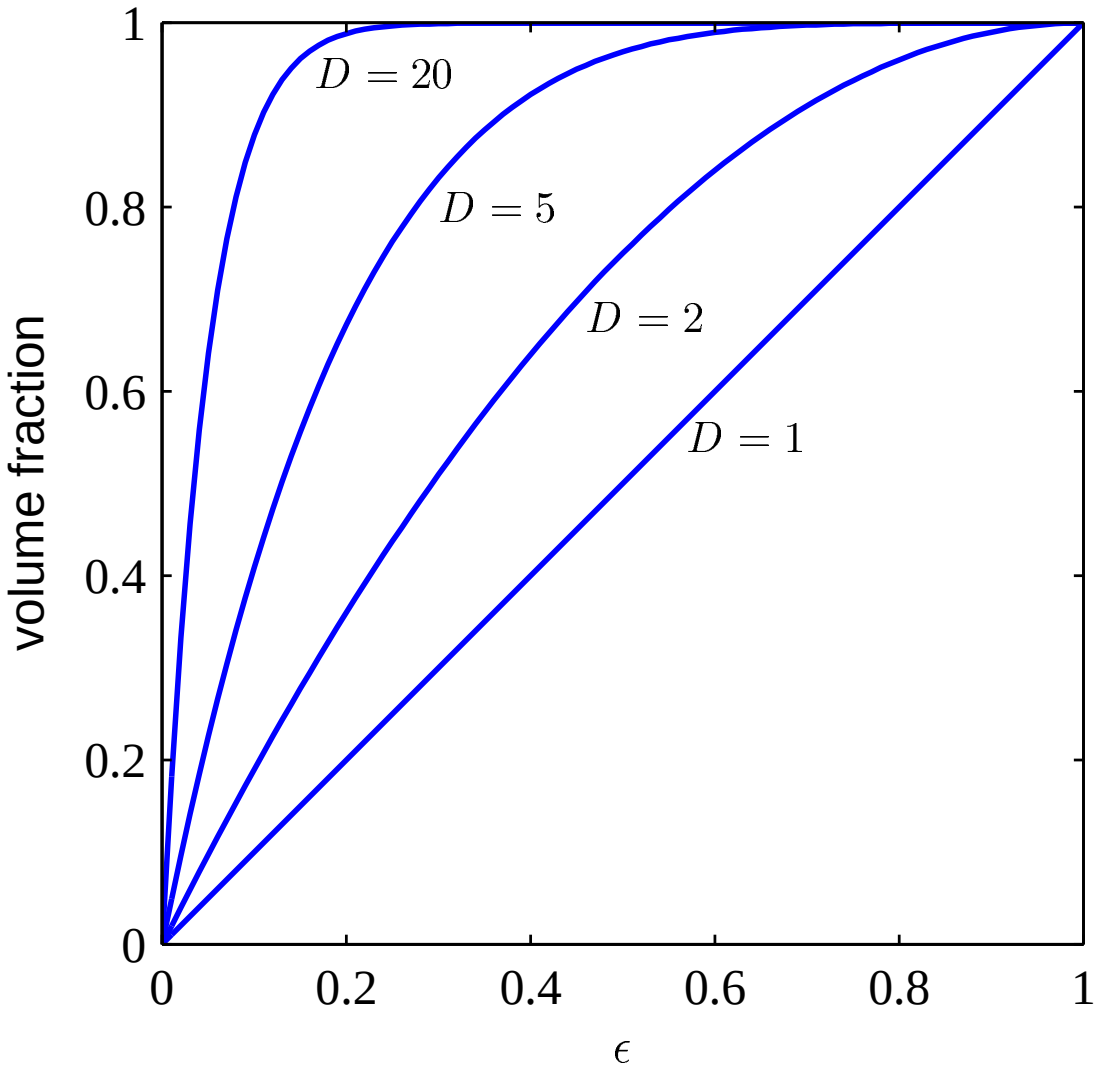

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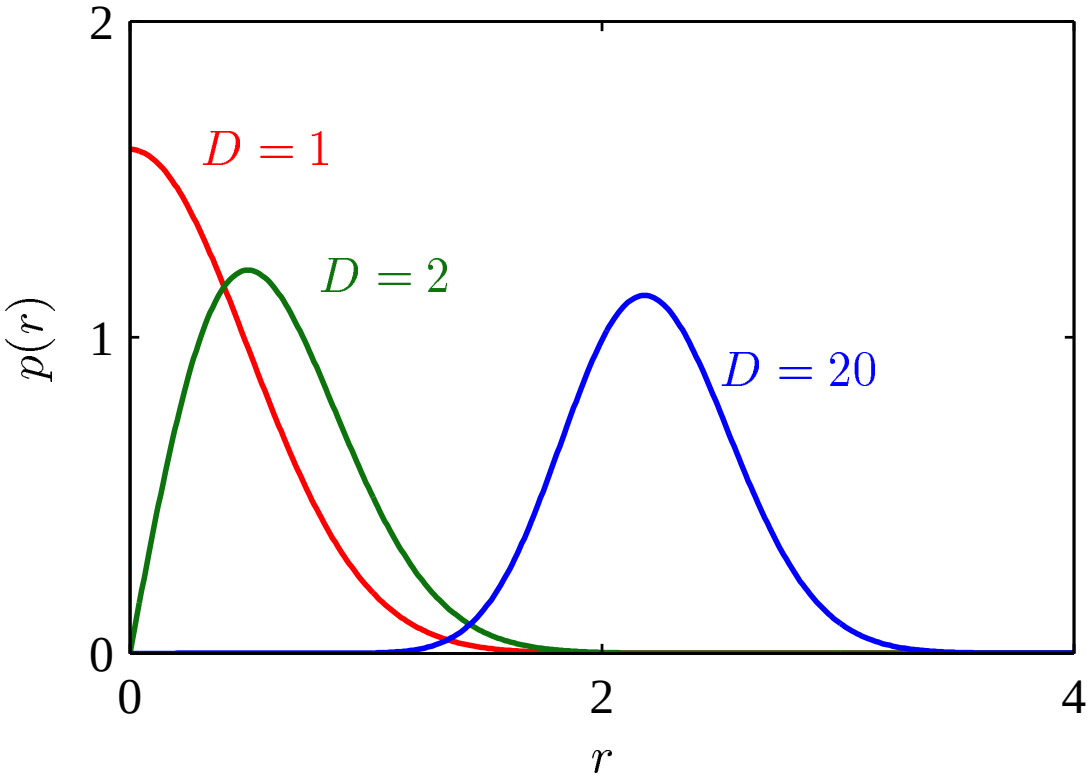

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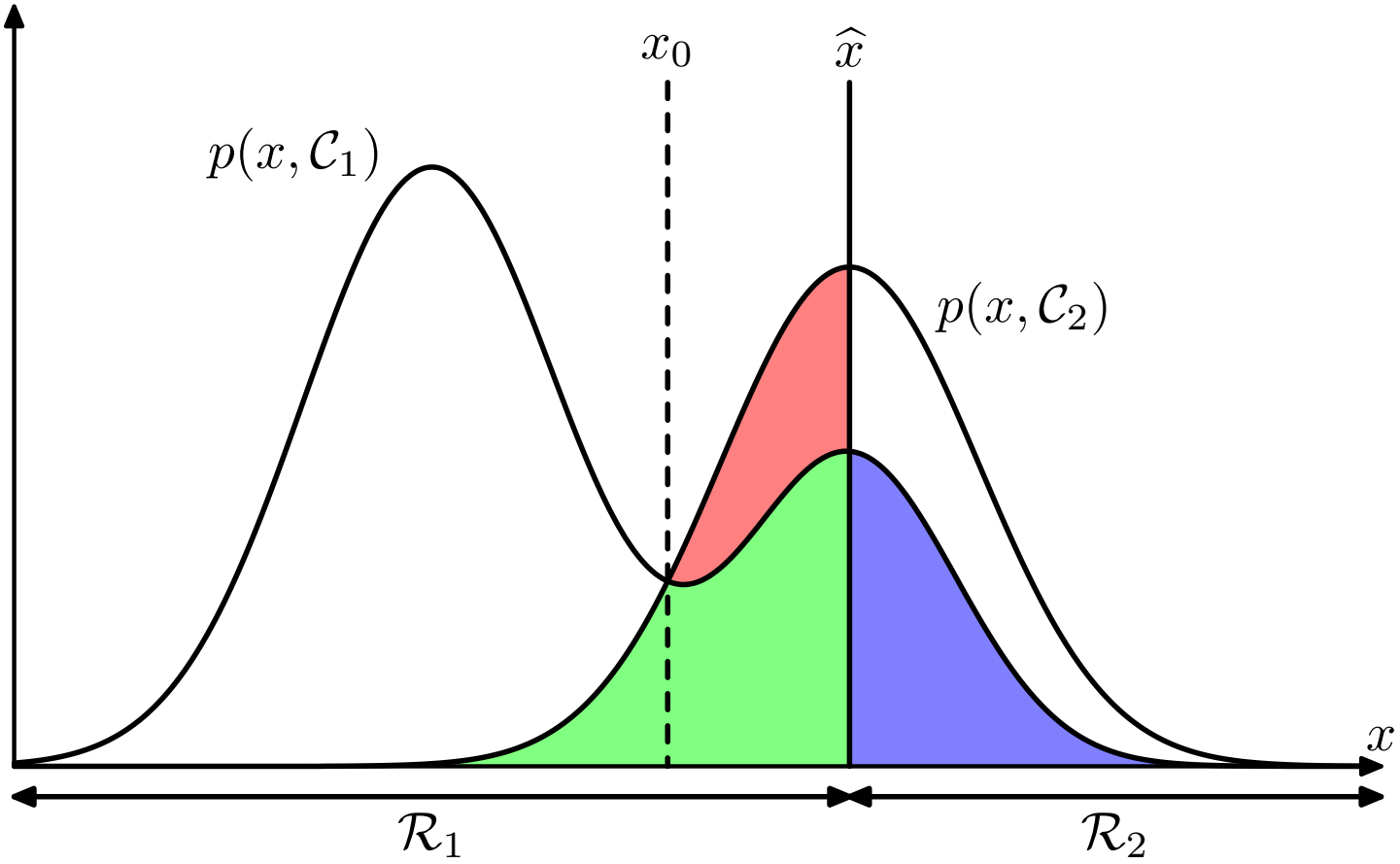

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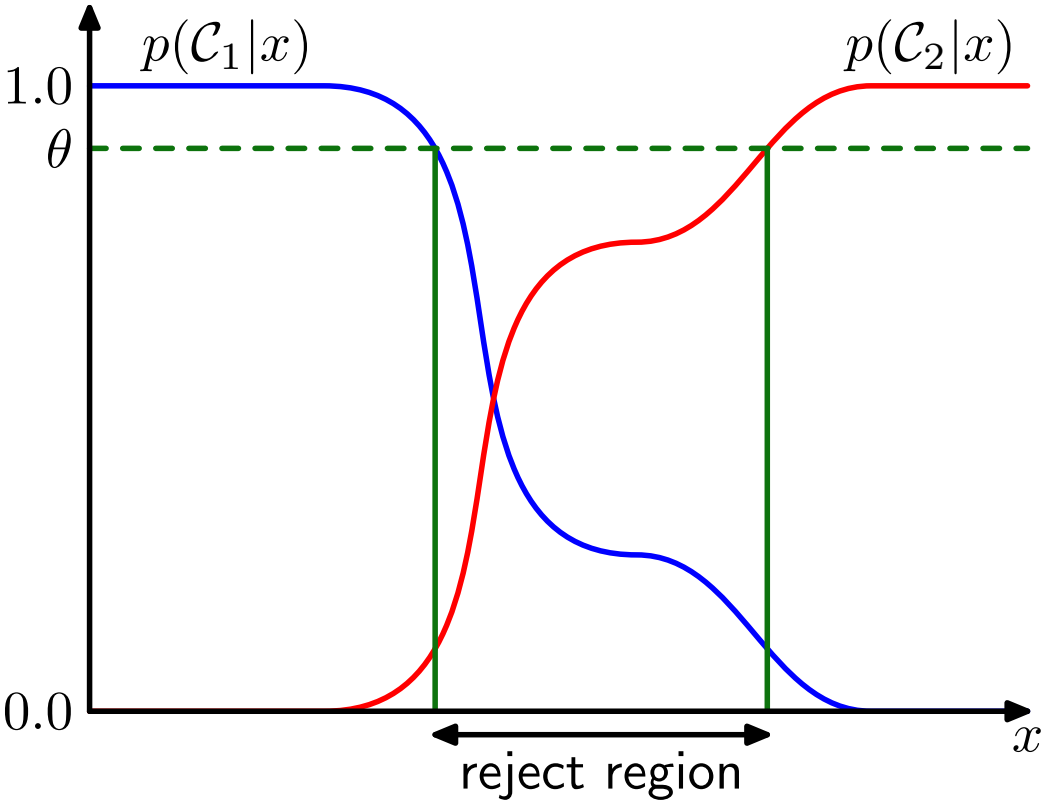

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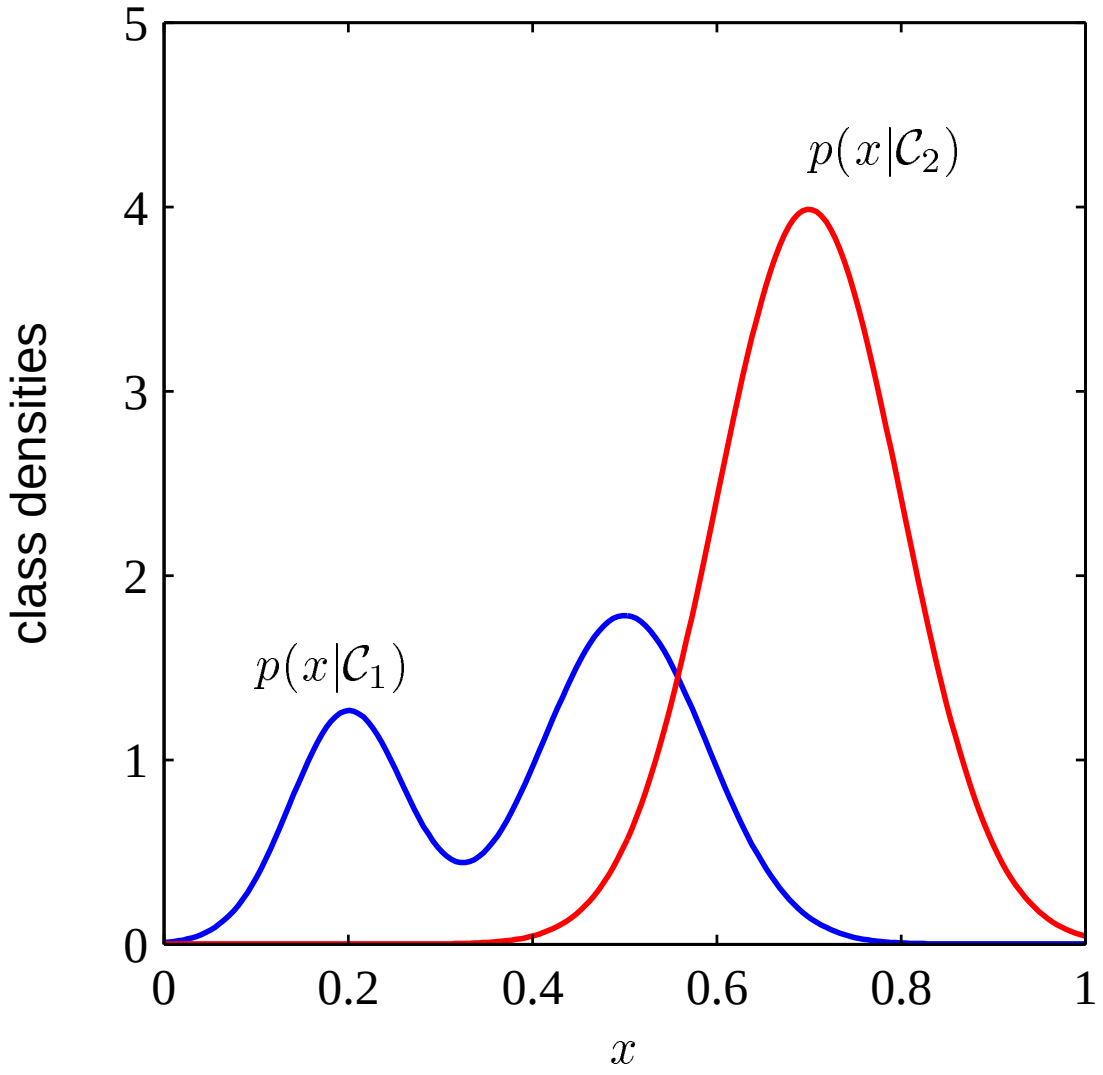

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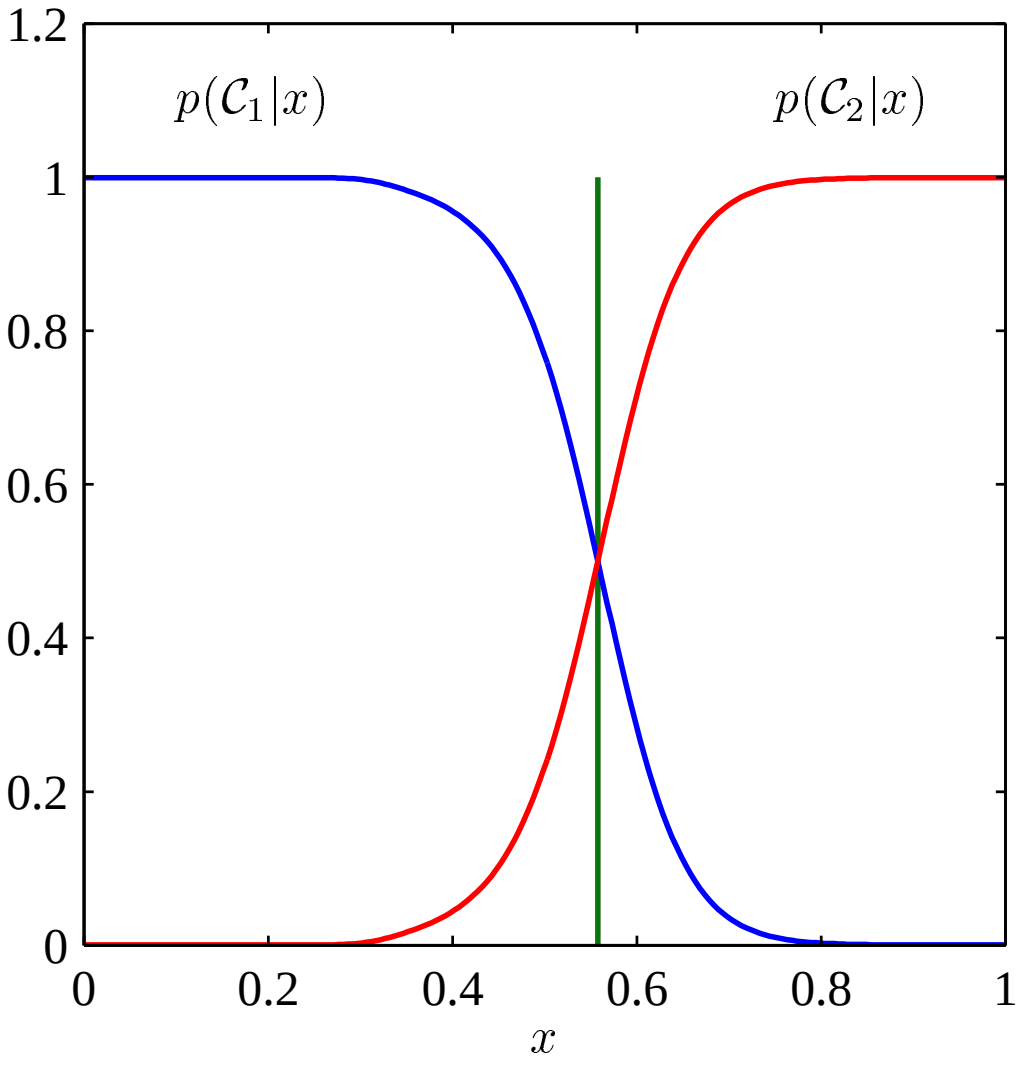

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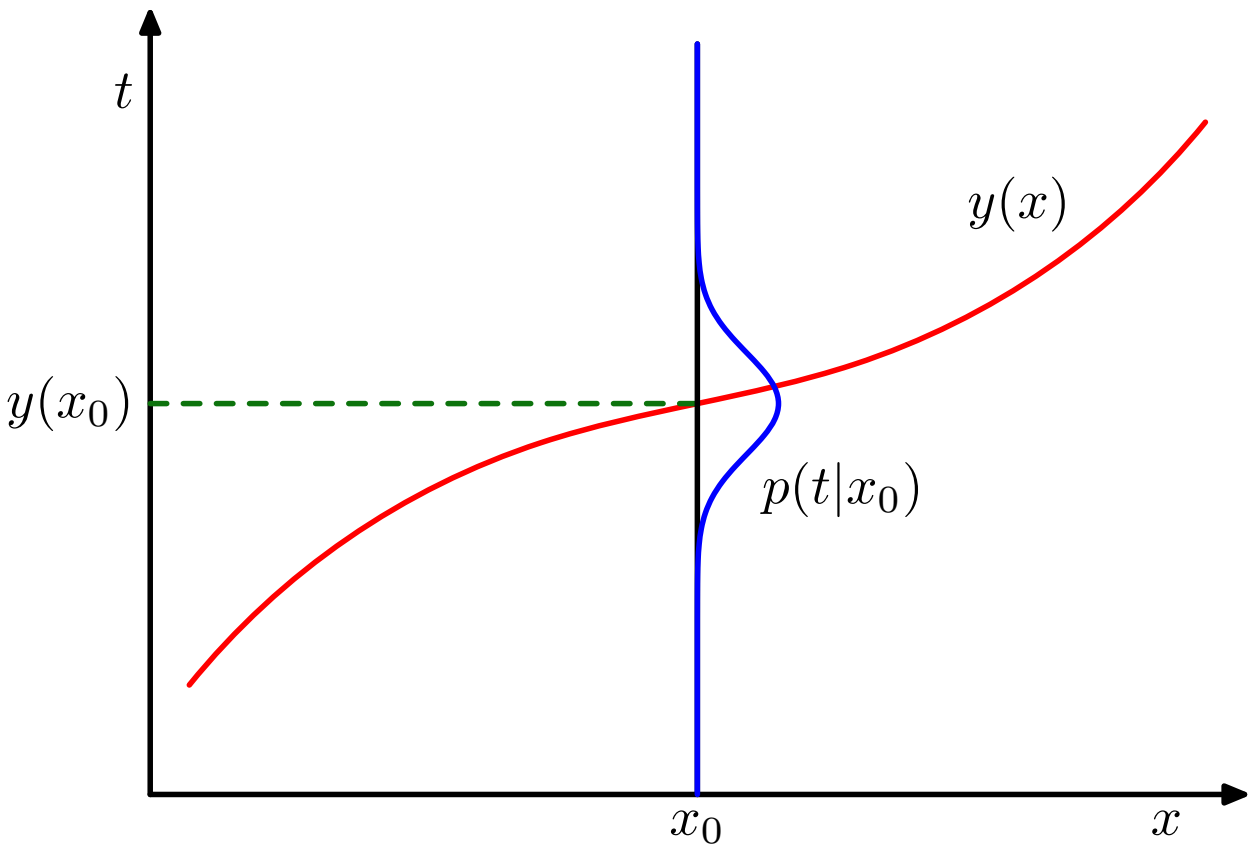

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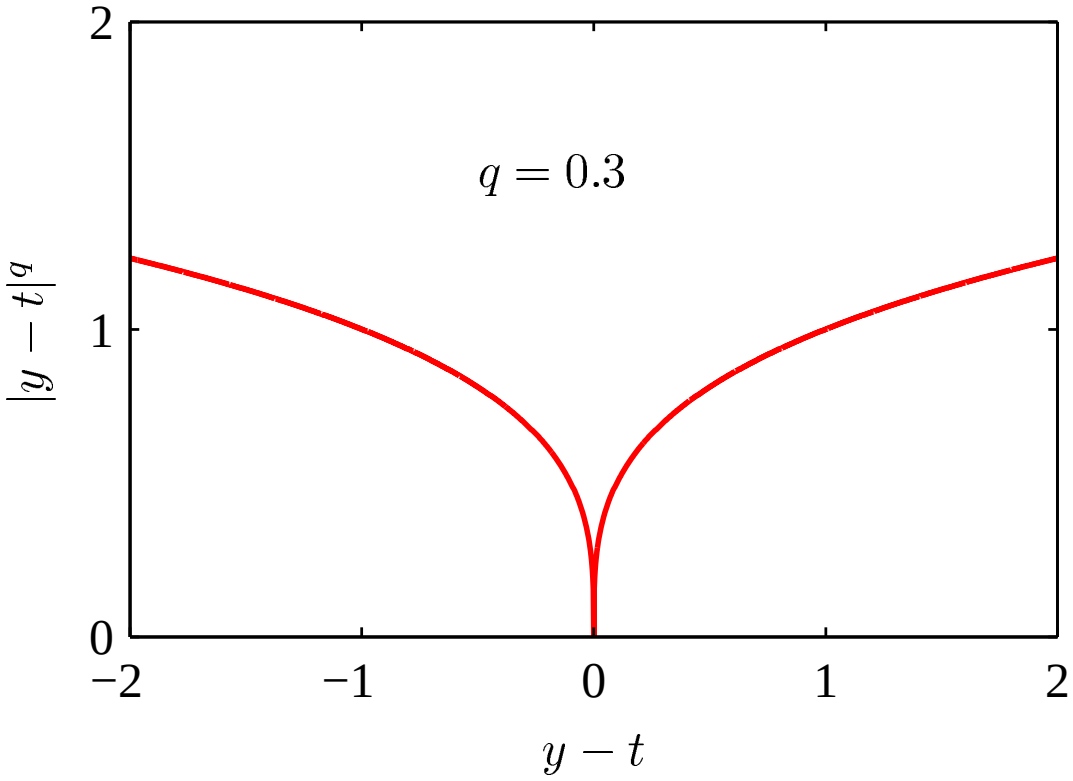

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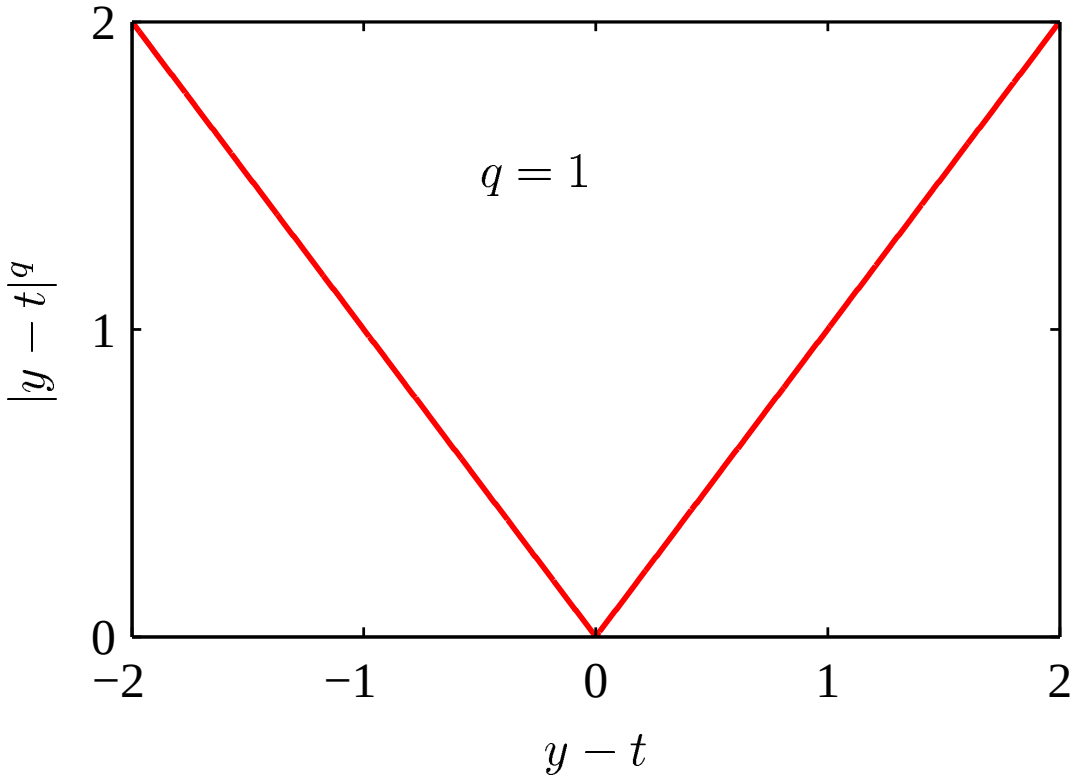

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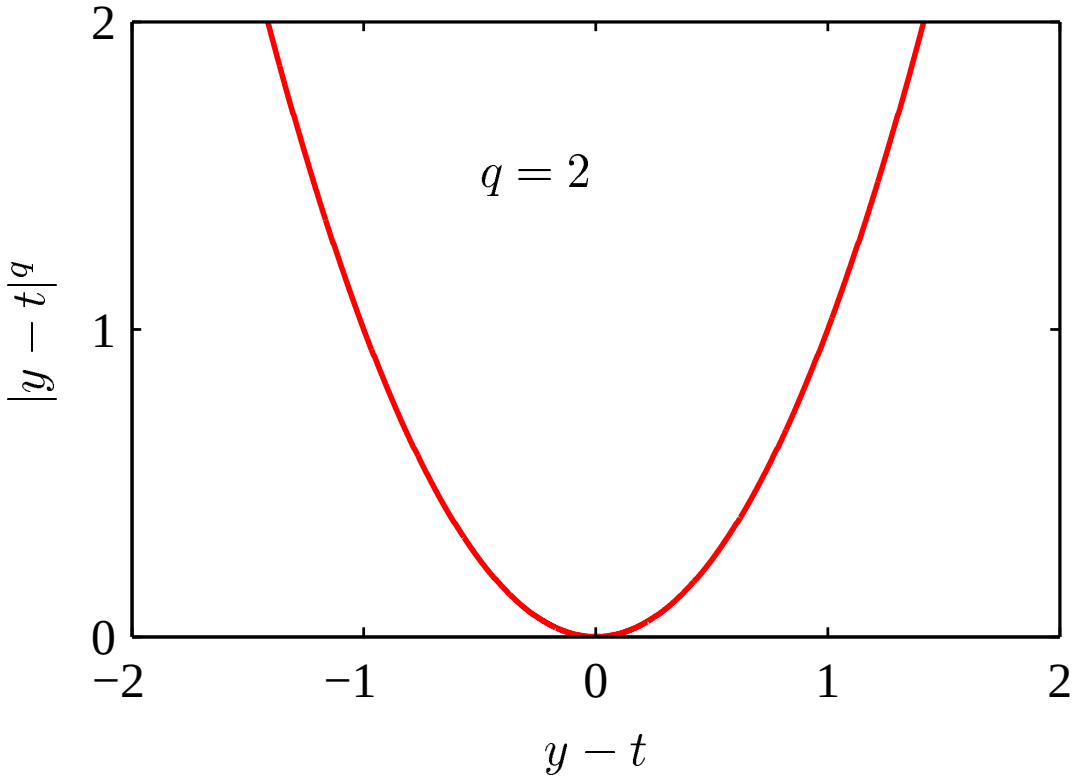

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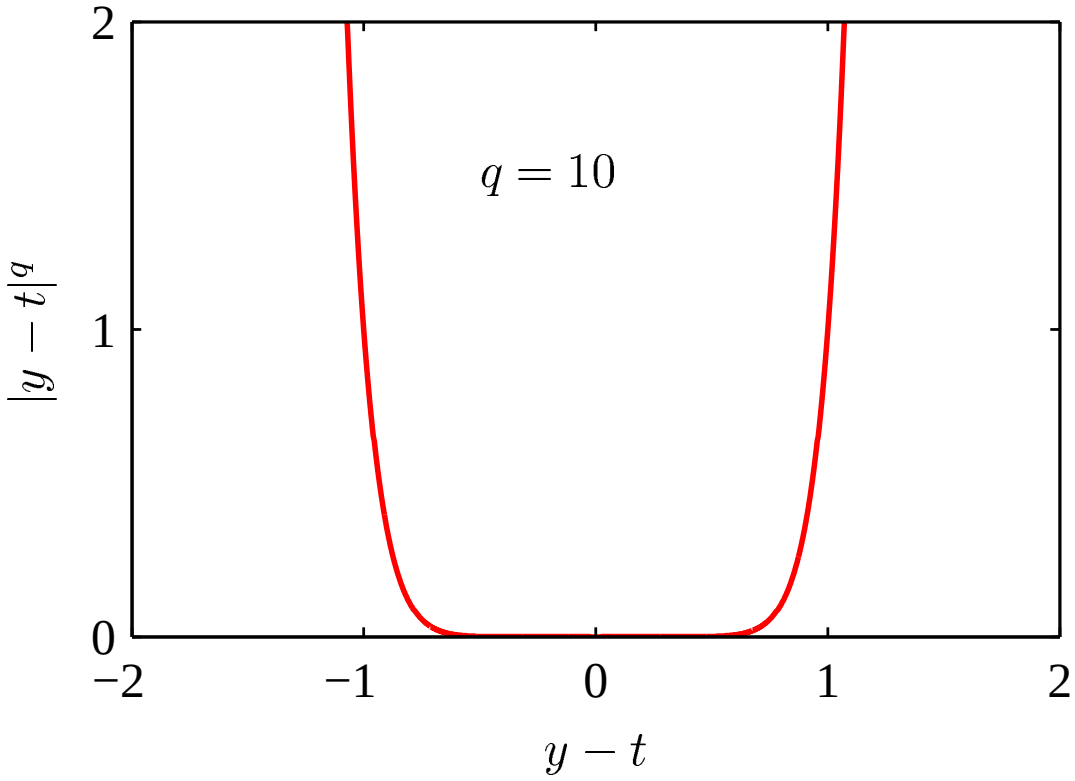

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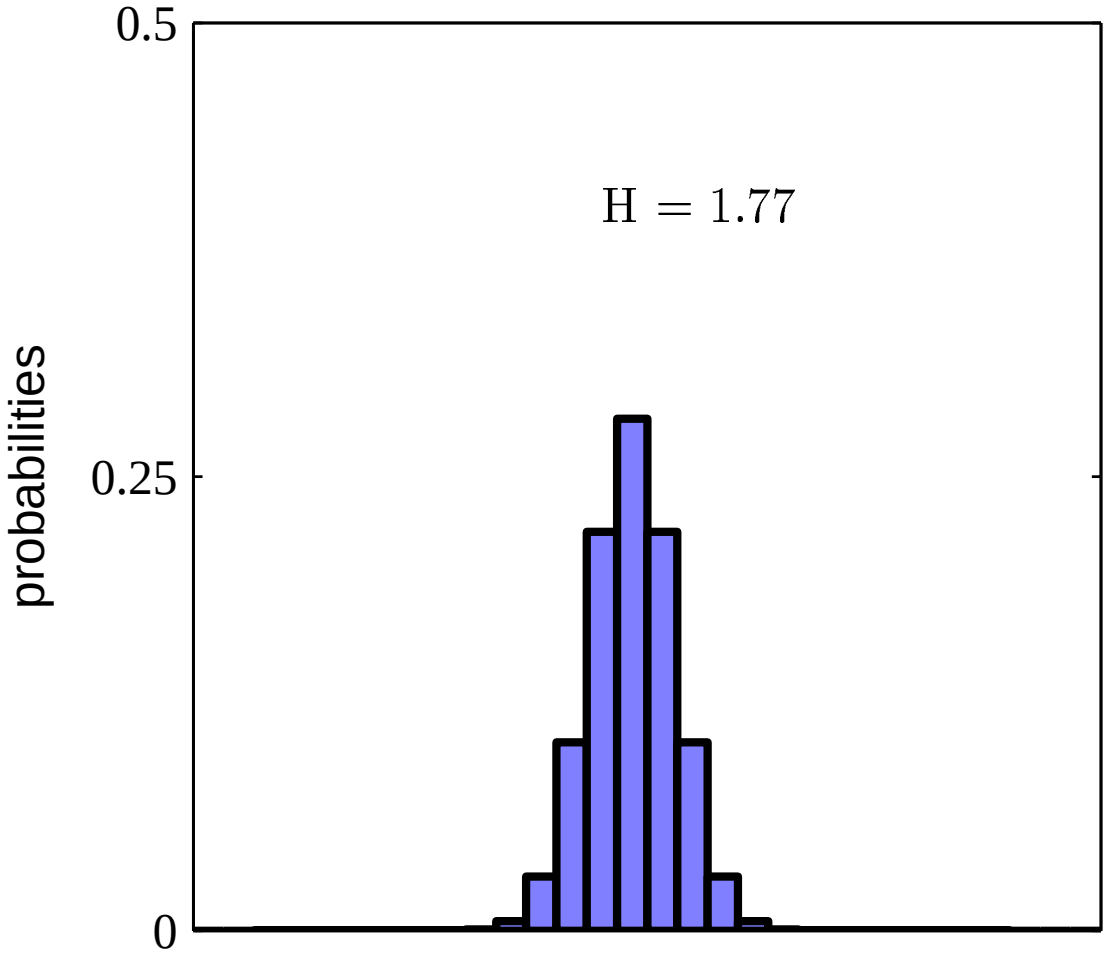

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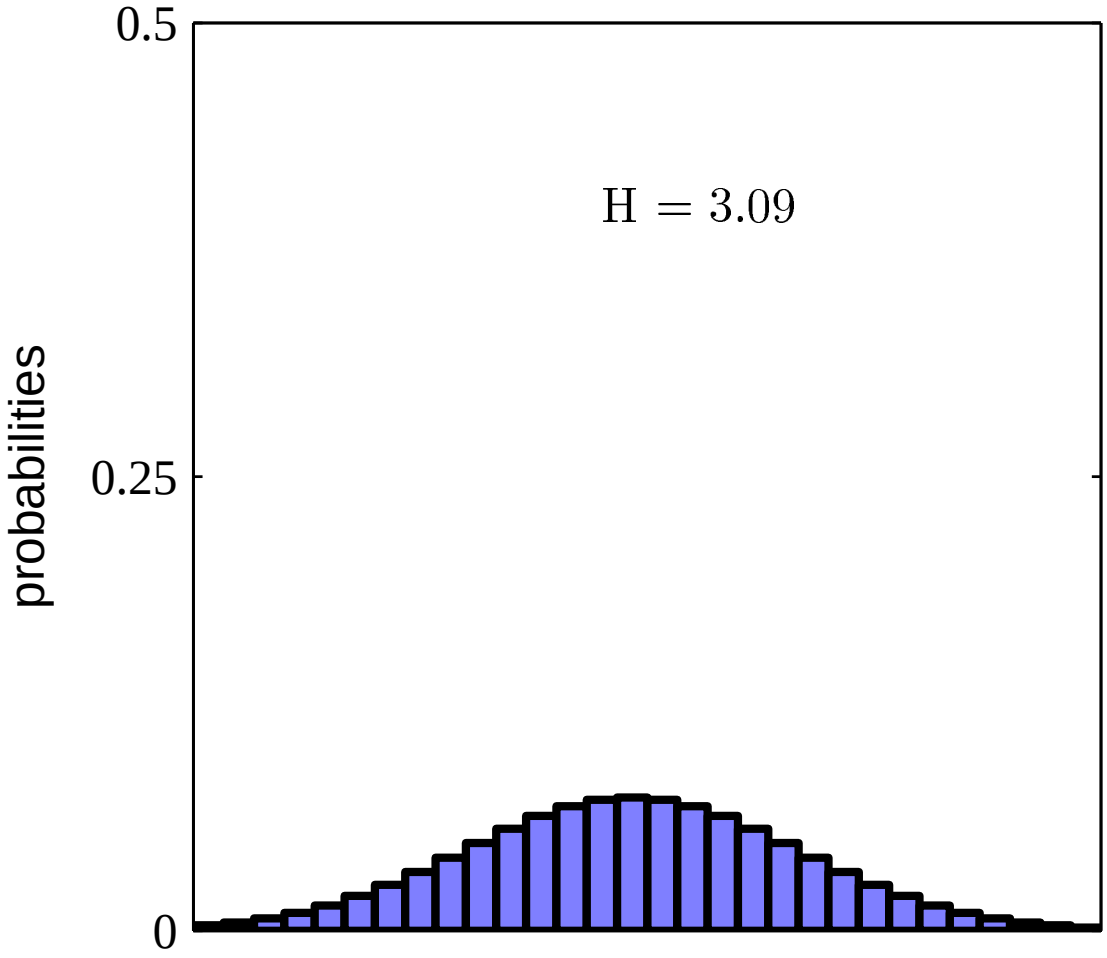

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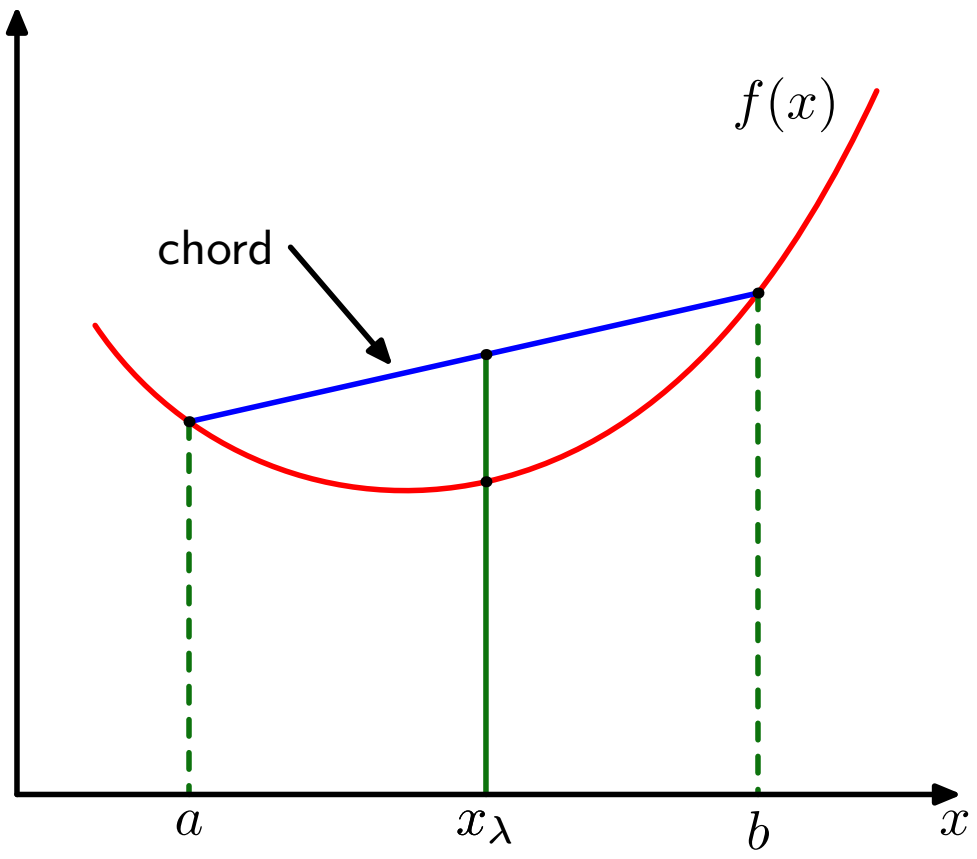

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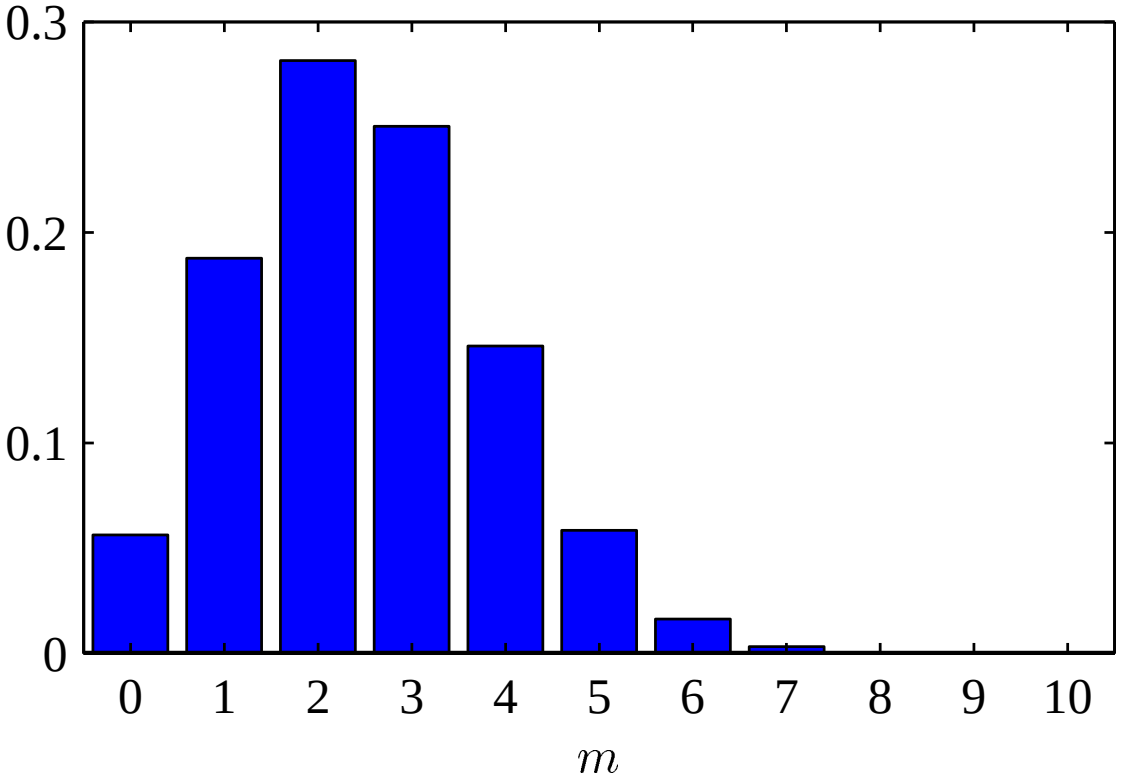

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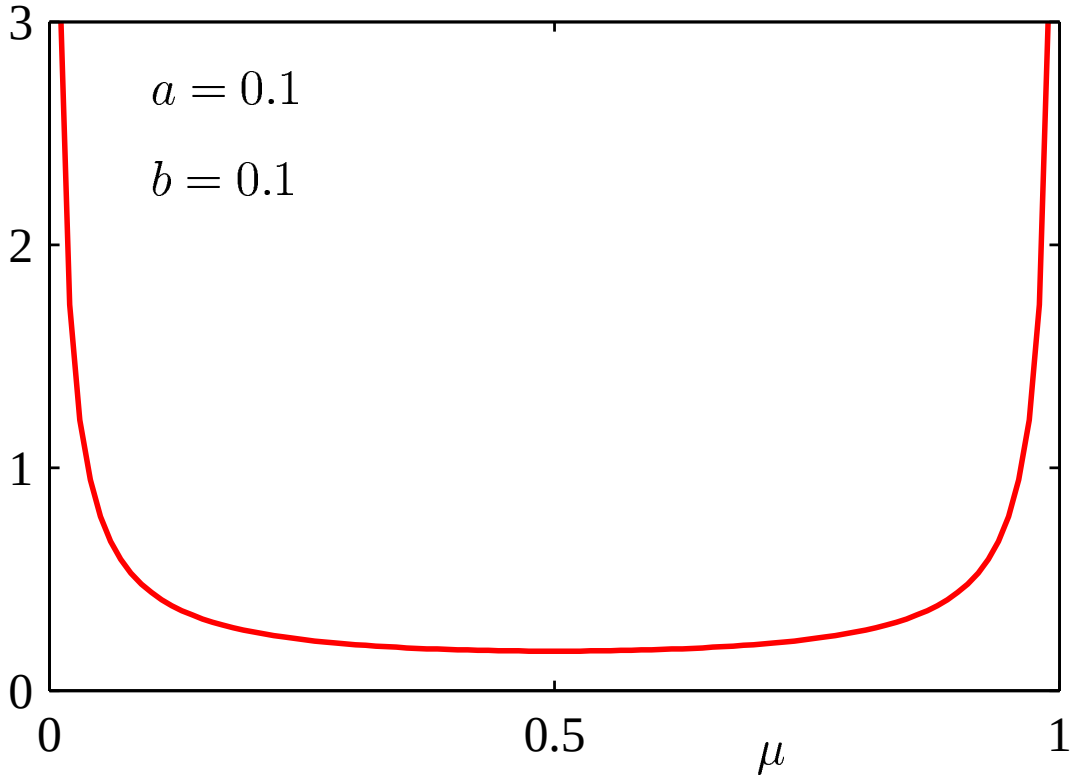

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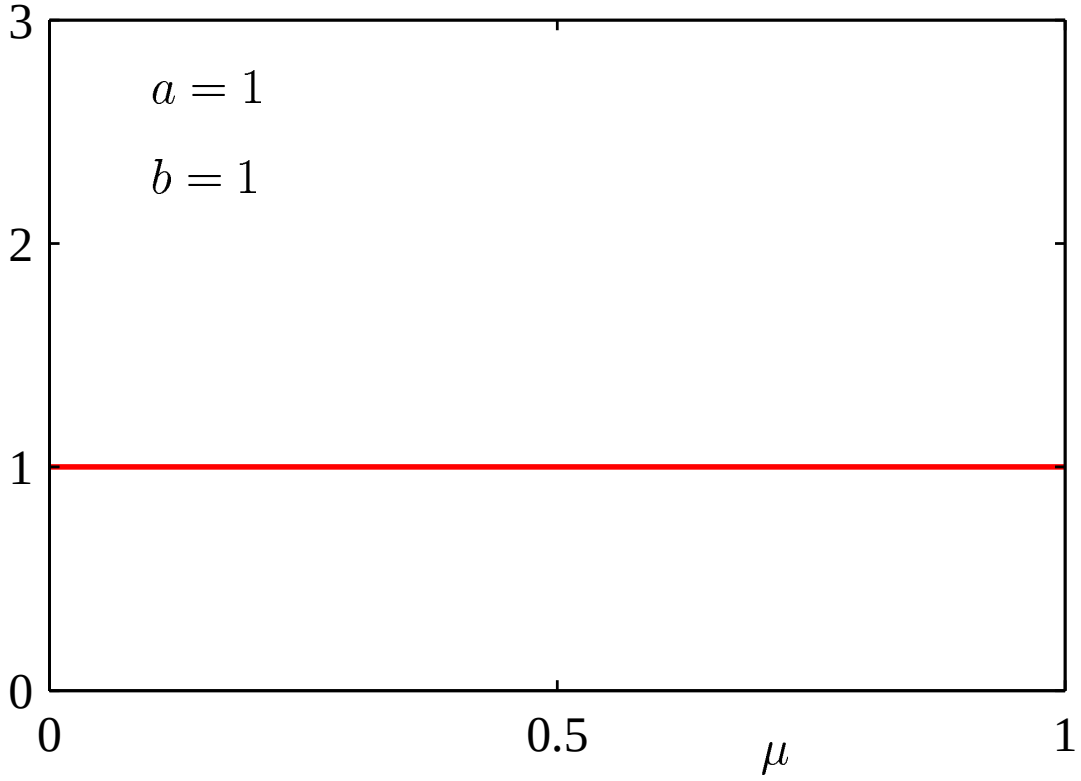

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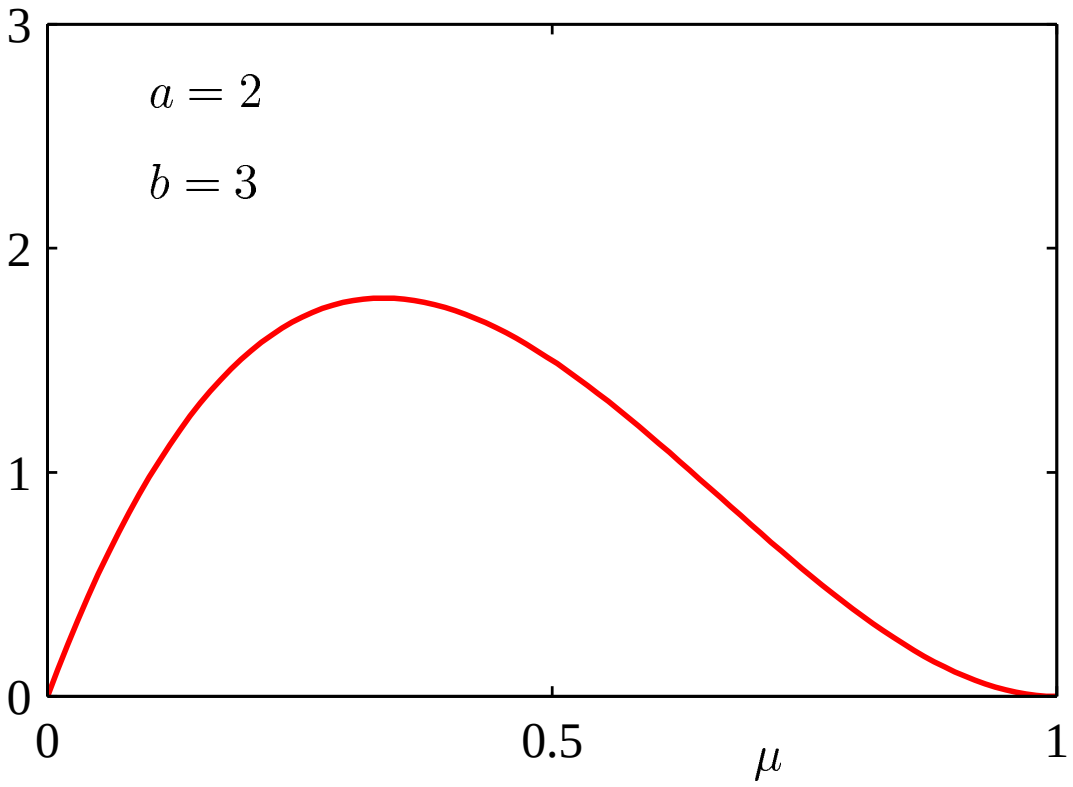

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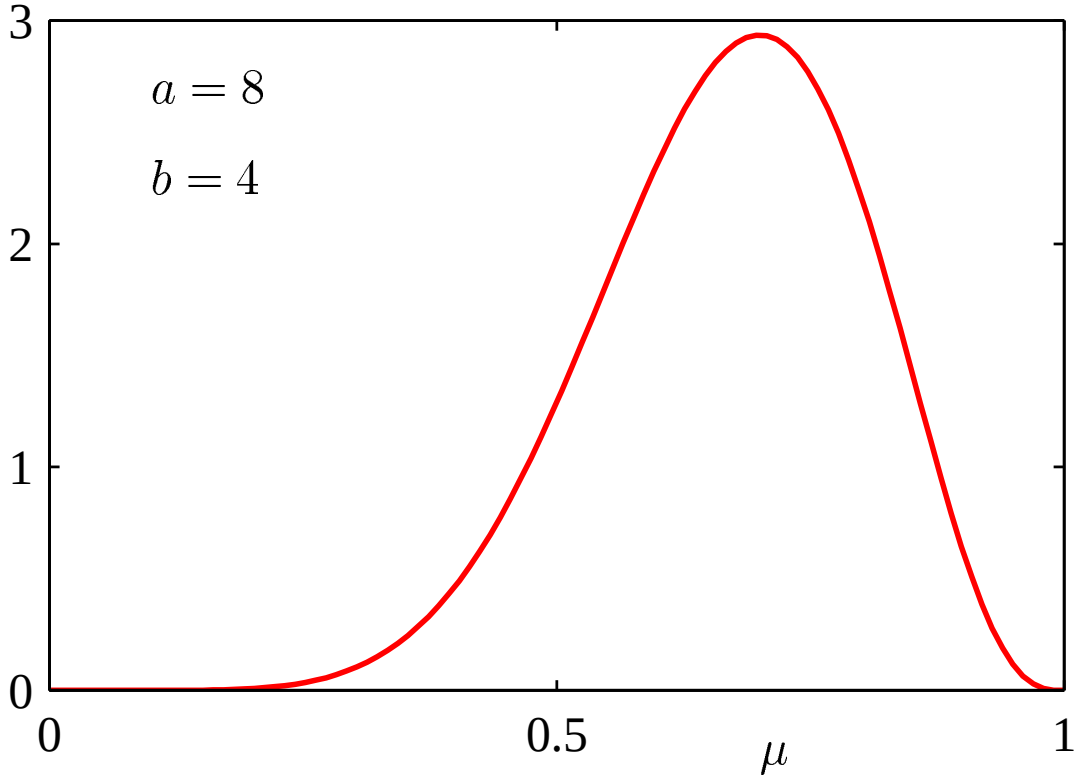

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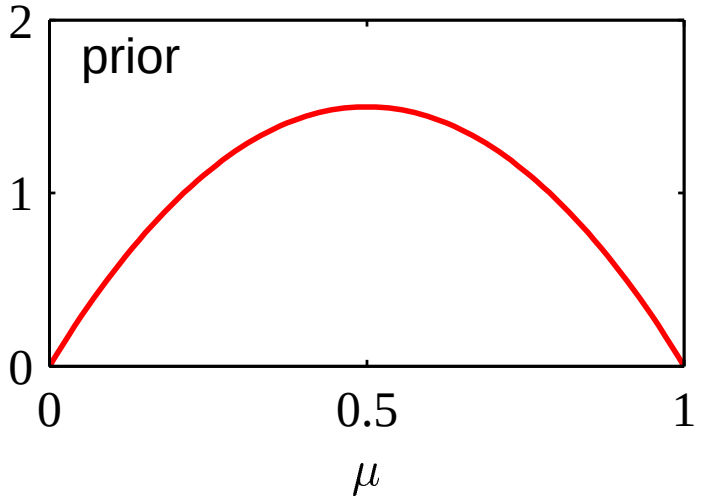

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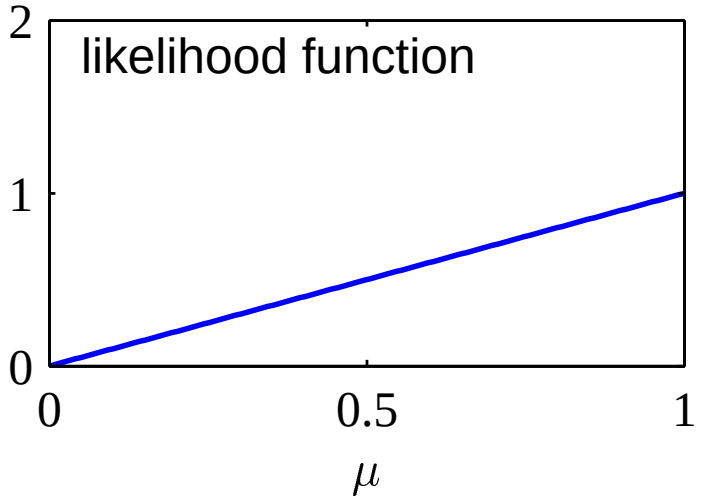

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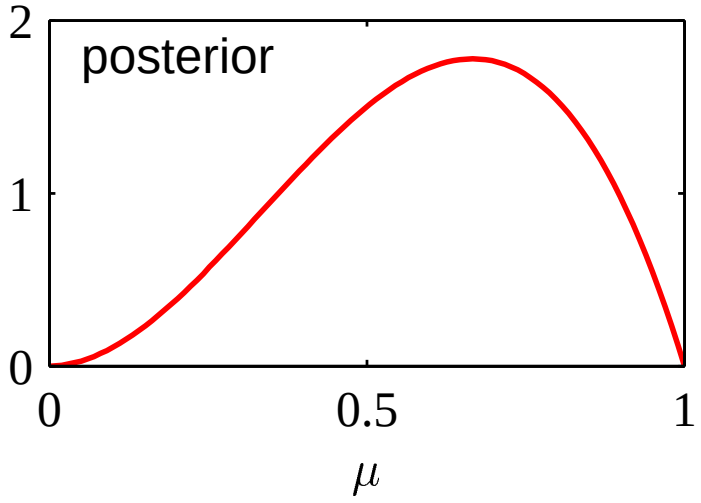

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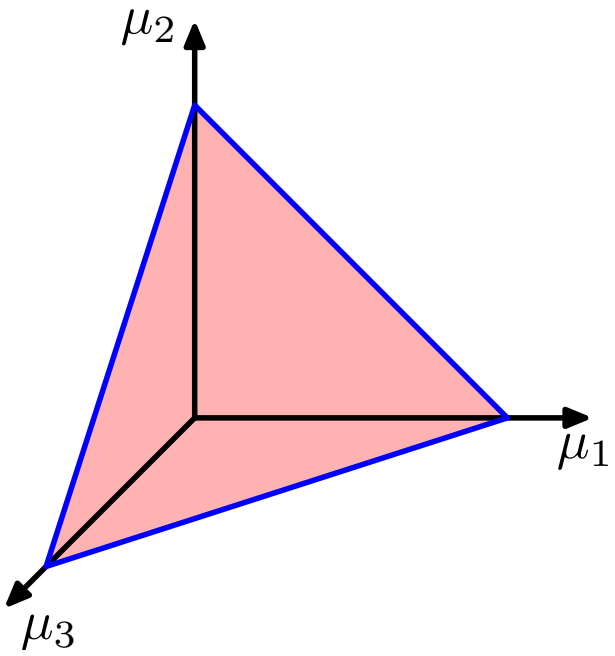


Figure: Chapter 2, Figure 4

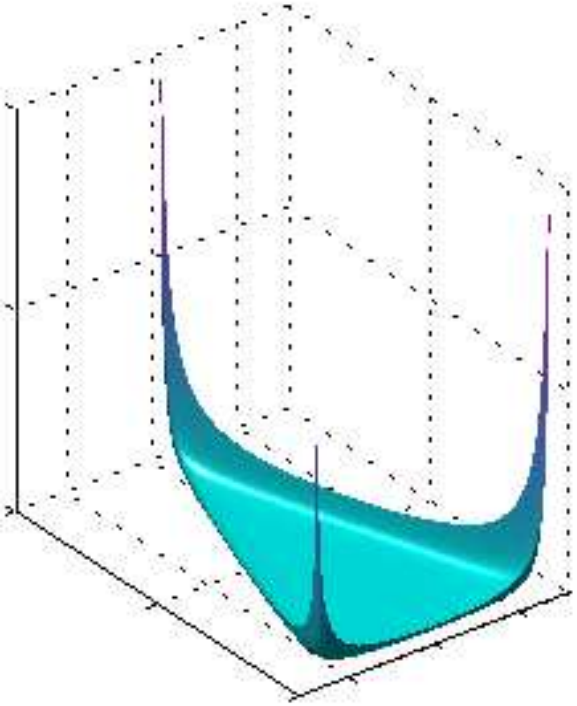


Figure: Chapter 2, Figure 5a

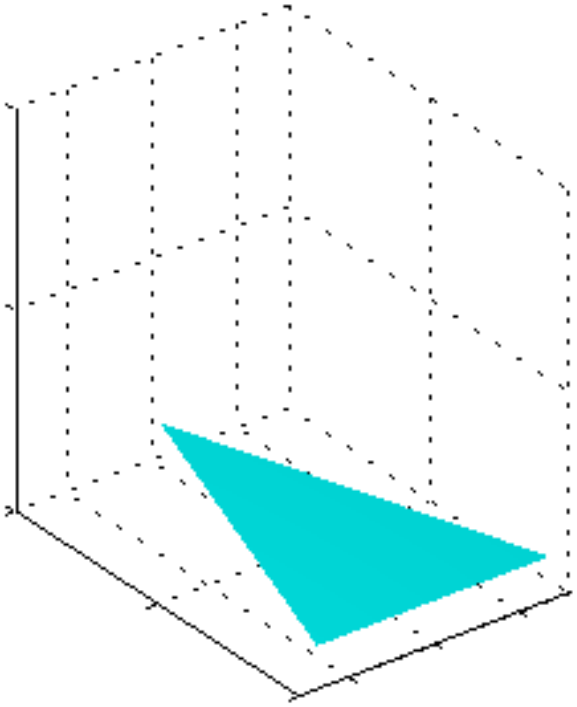


Figure: Chapter 2, Figure 5b

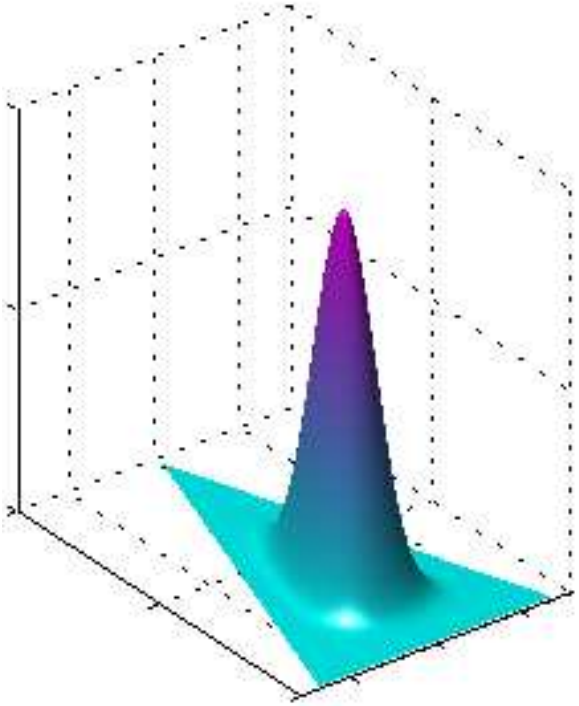


Figure: Chapter 2, Figure 5c

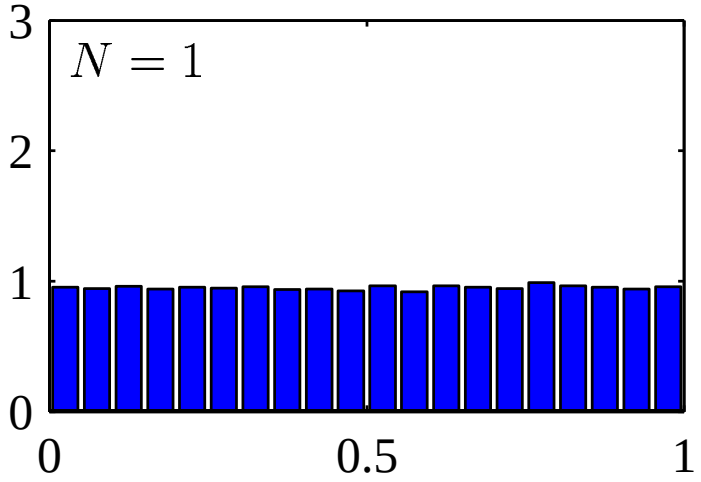
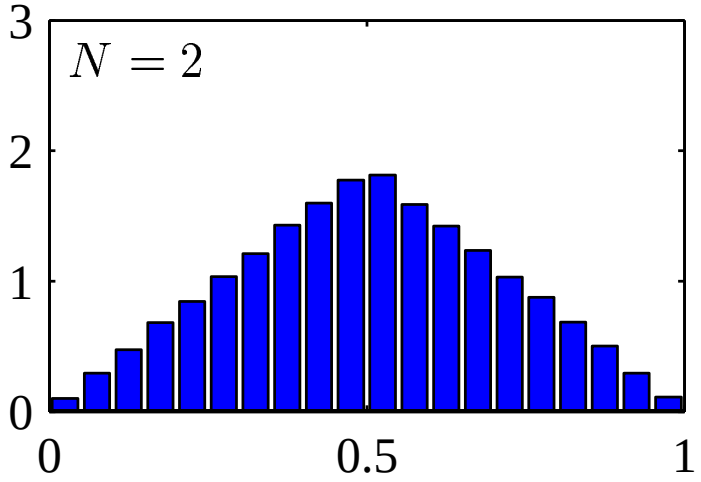


Figure: Chapter 2, Figure 6a



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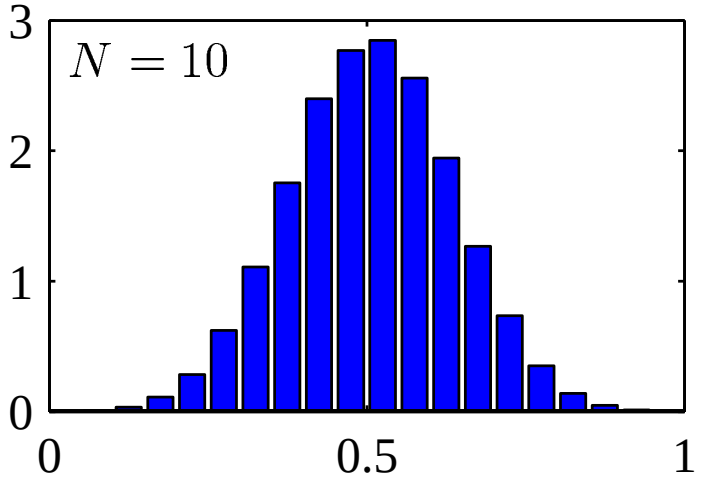

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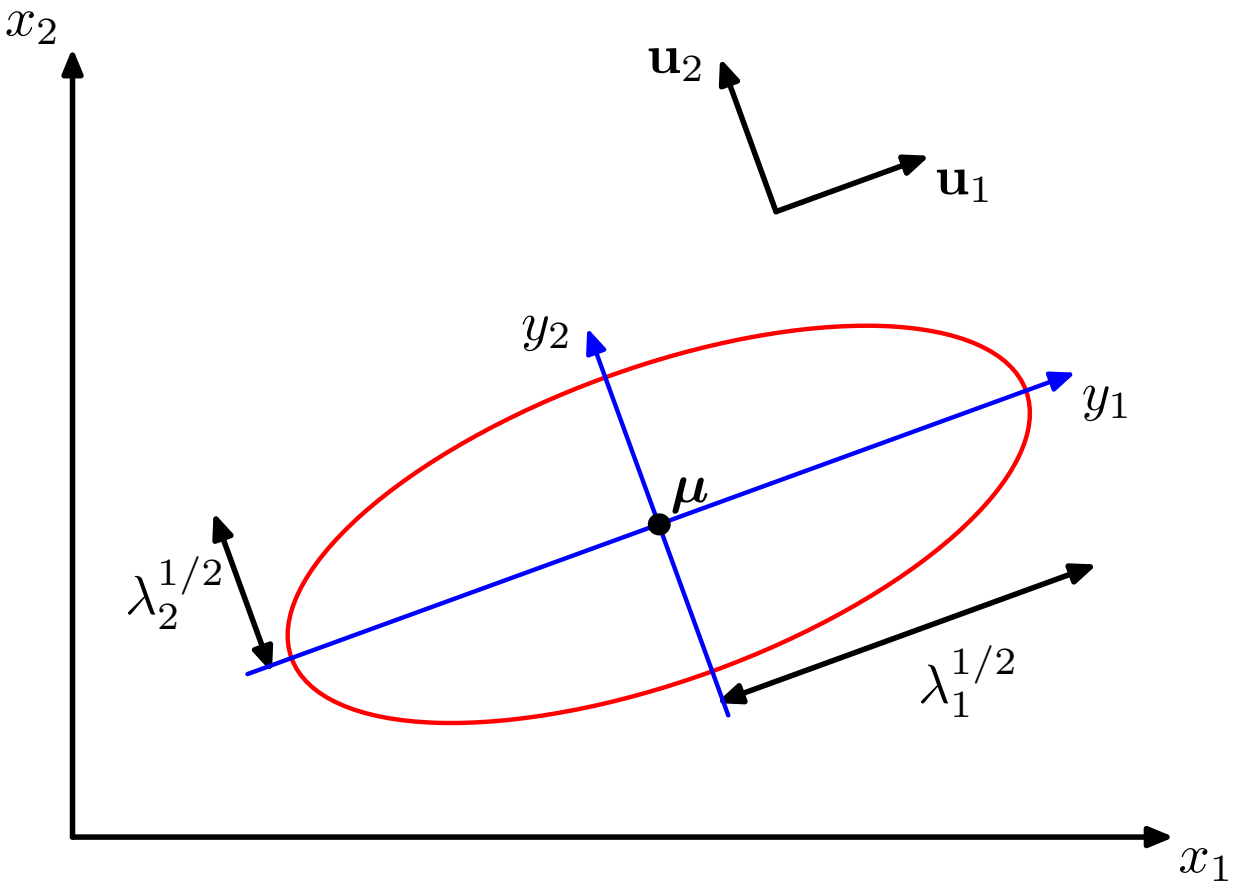

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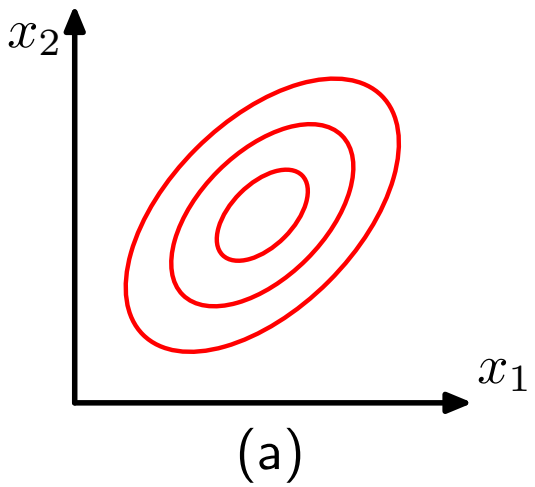


Figure: Chapter 2, Figure 8a

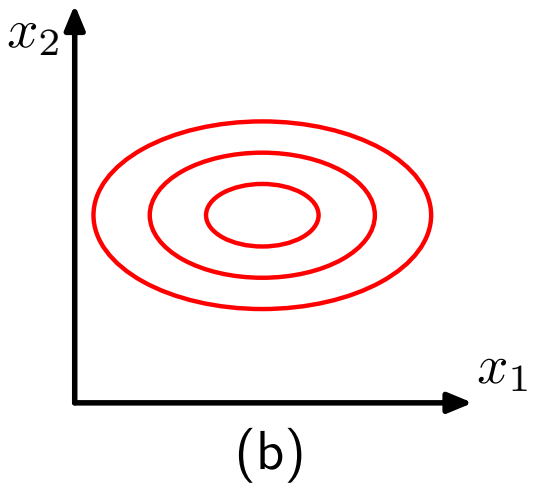
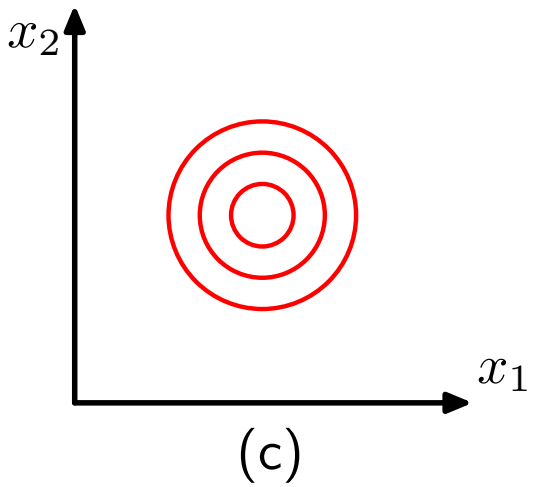


Figure: Chapter 2, Figure 8b



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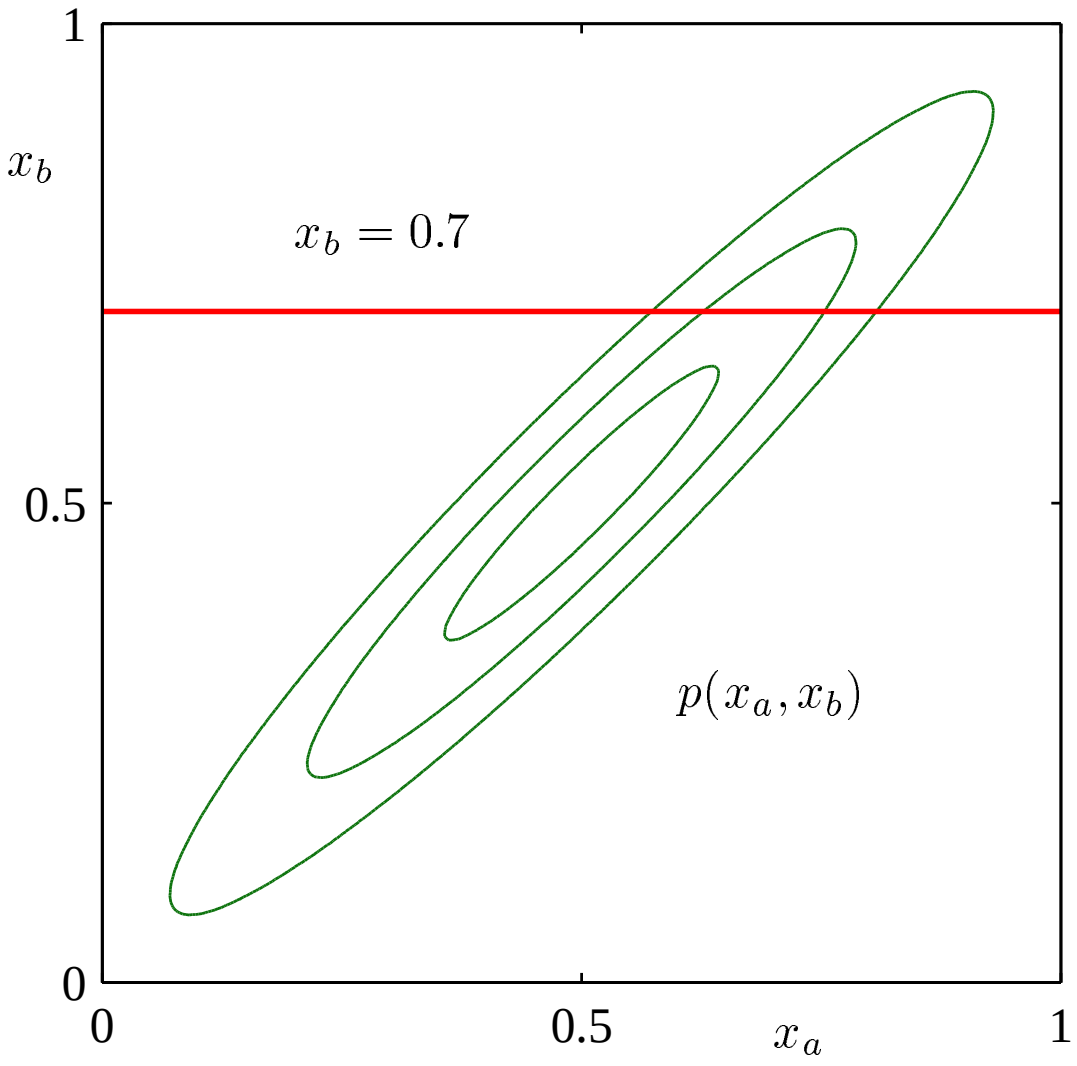
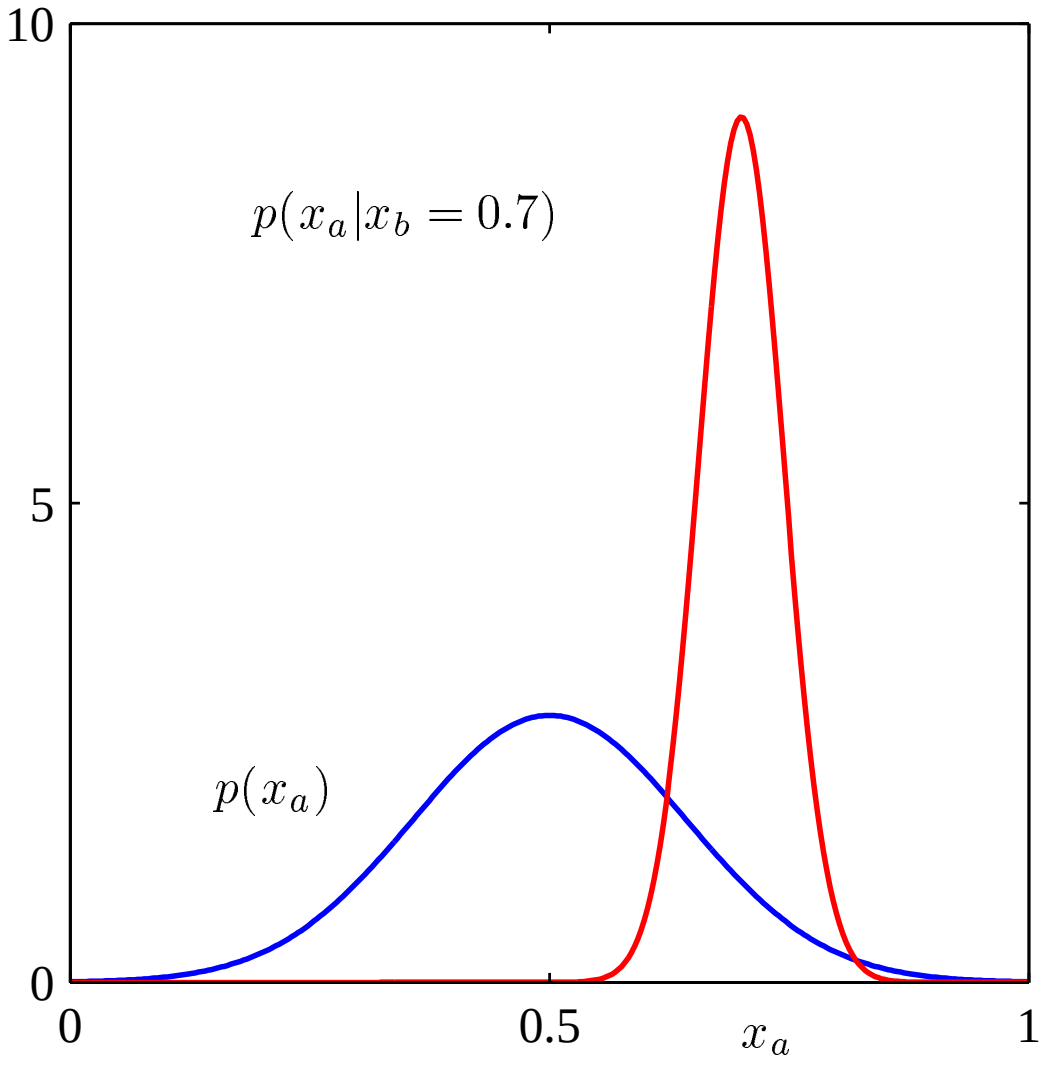


Figure: Chapter 2, Figure 9a



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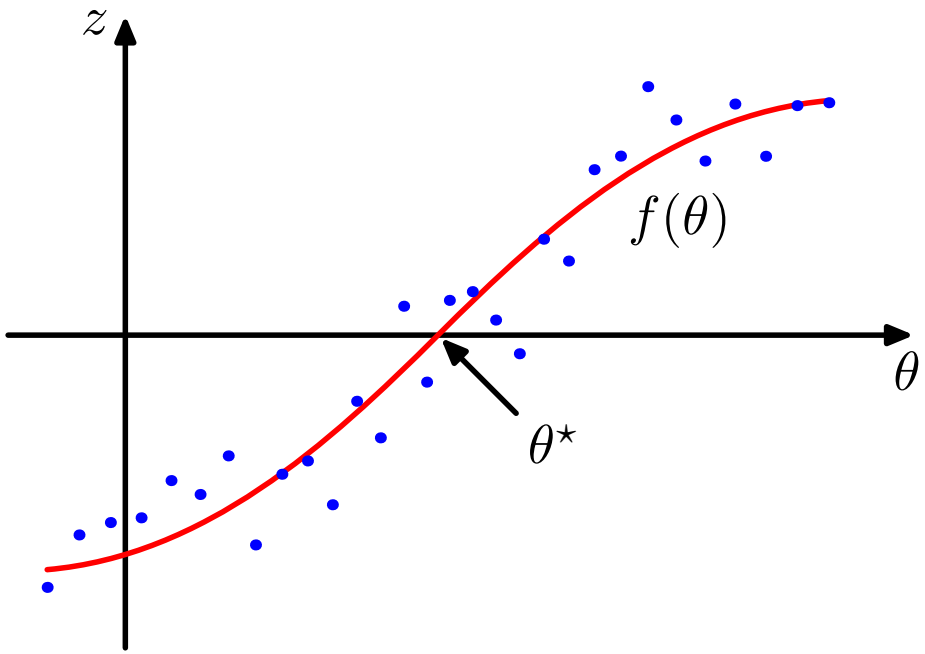

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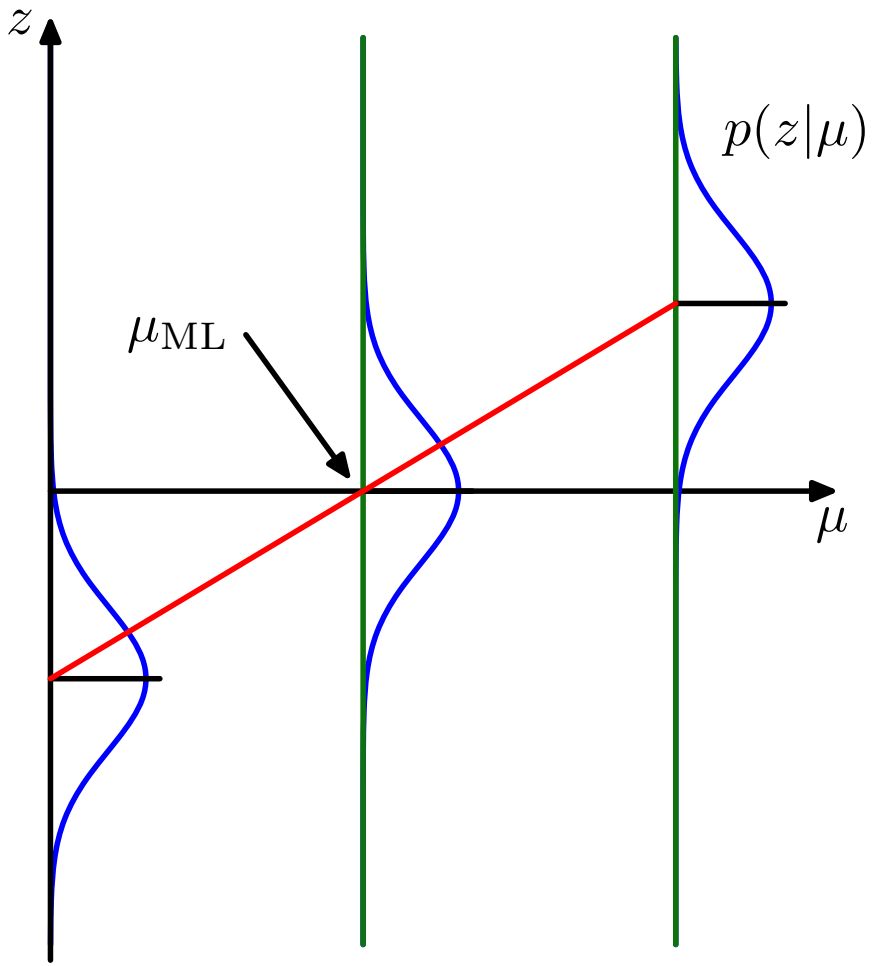


Figure: Chapter 2, Figure 11

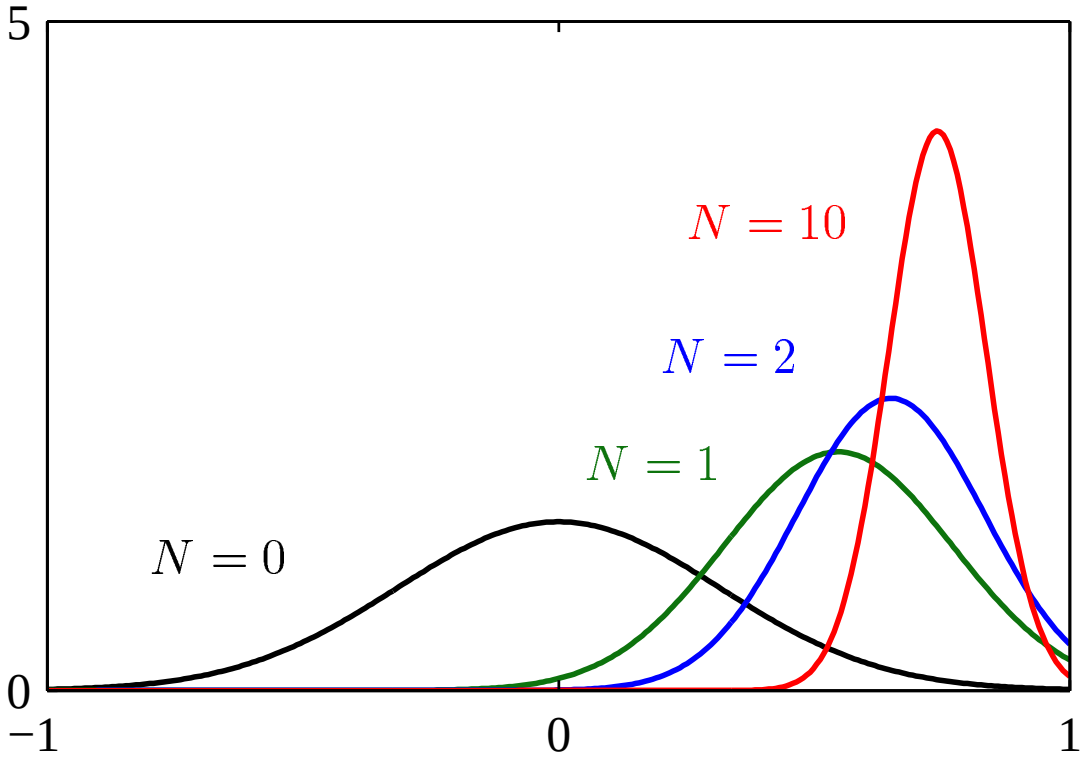


Figure: Chapter 2, Figure 12

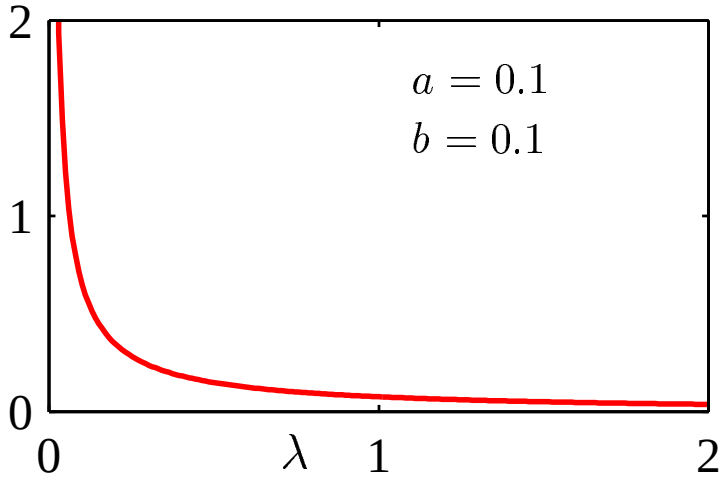


Figure: Chapter 2, Figure 13a

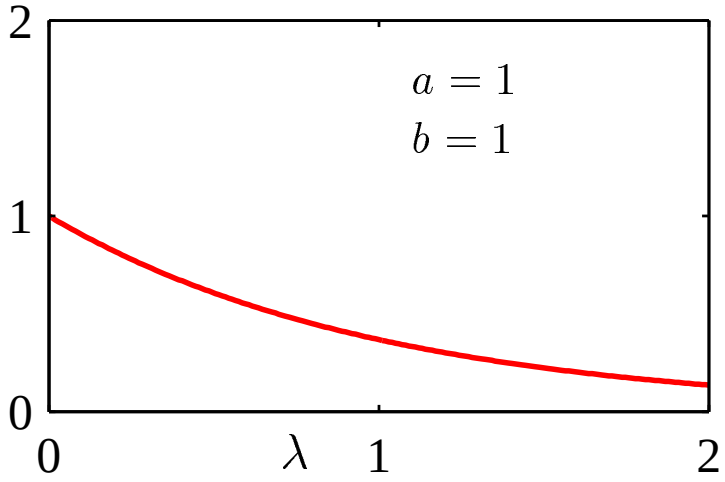
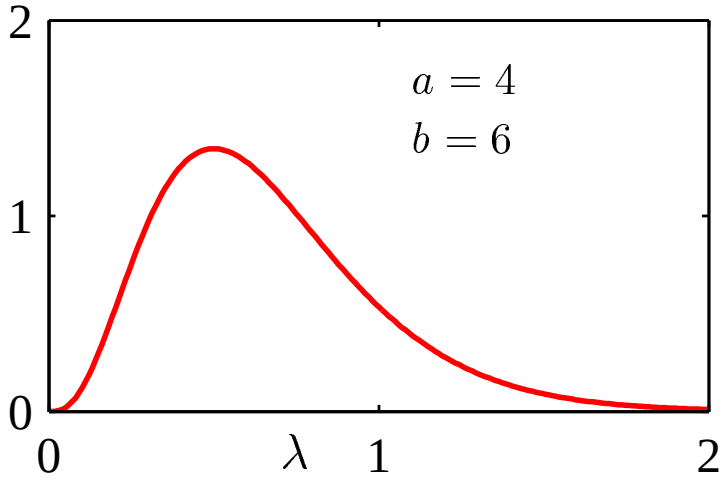


Figure: Chapter 2, Figure 13b



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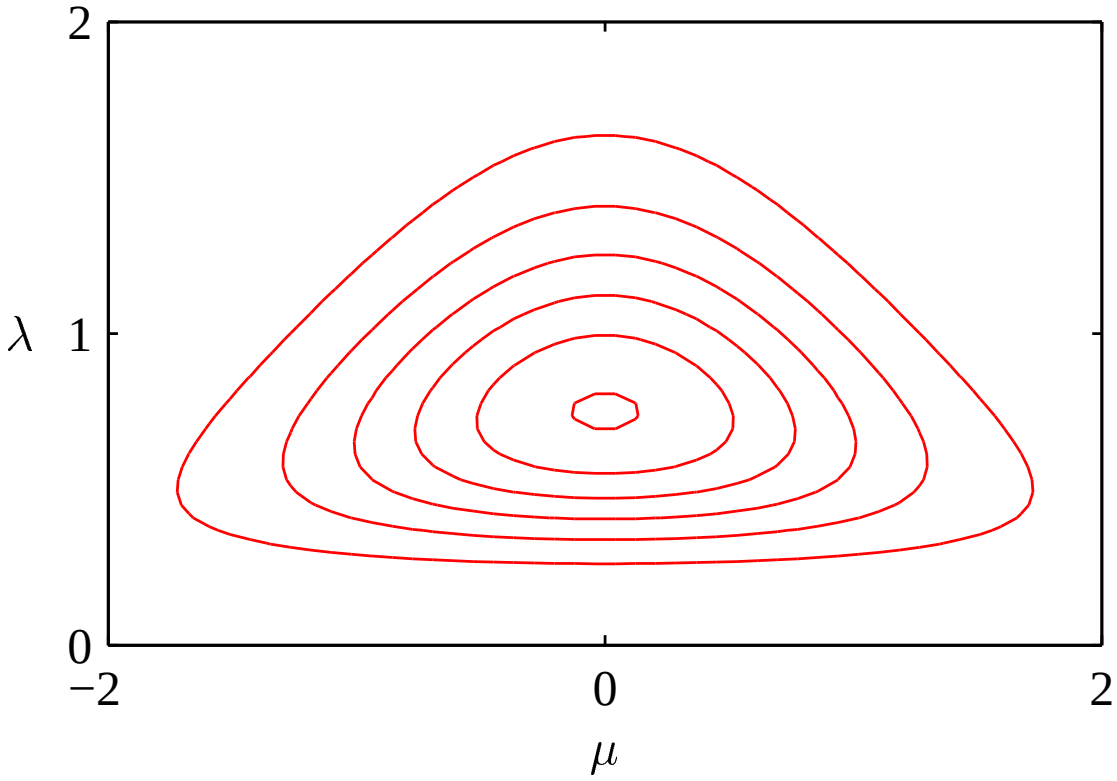


Figure: Chapter 2, Figure 14

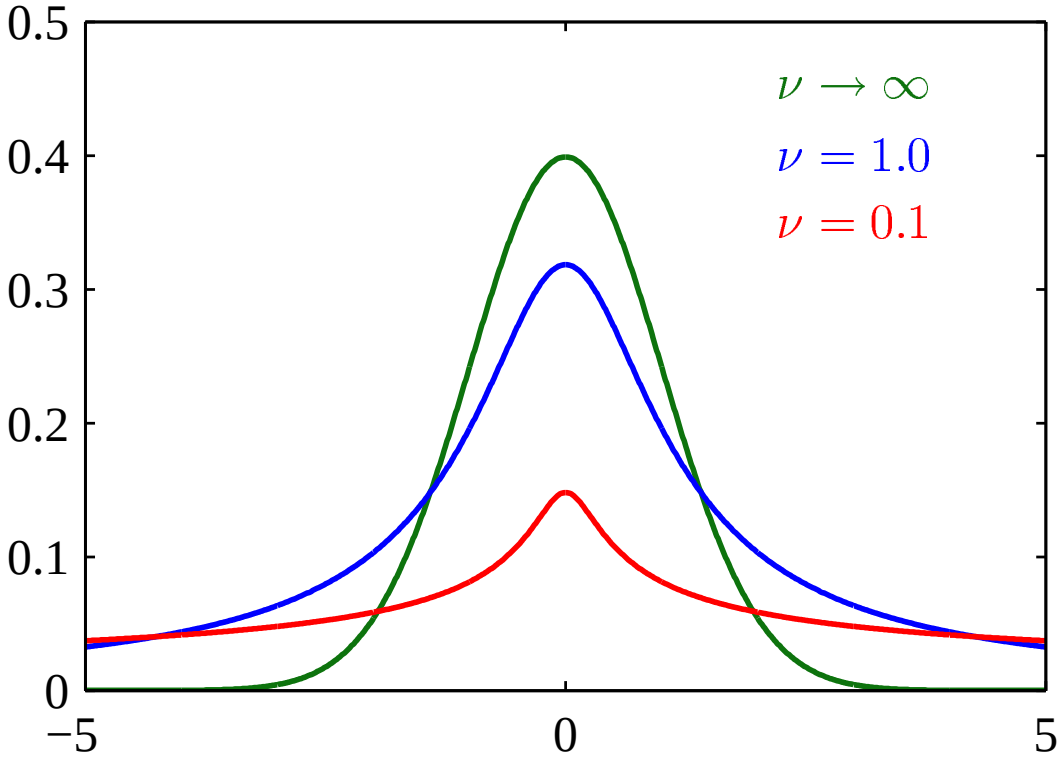
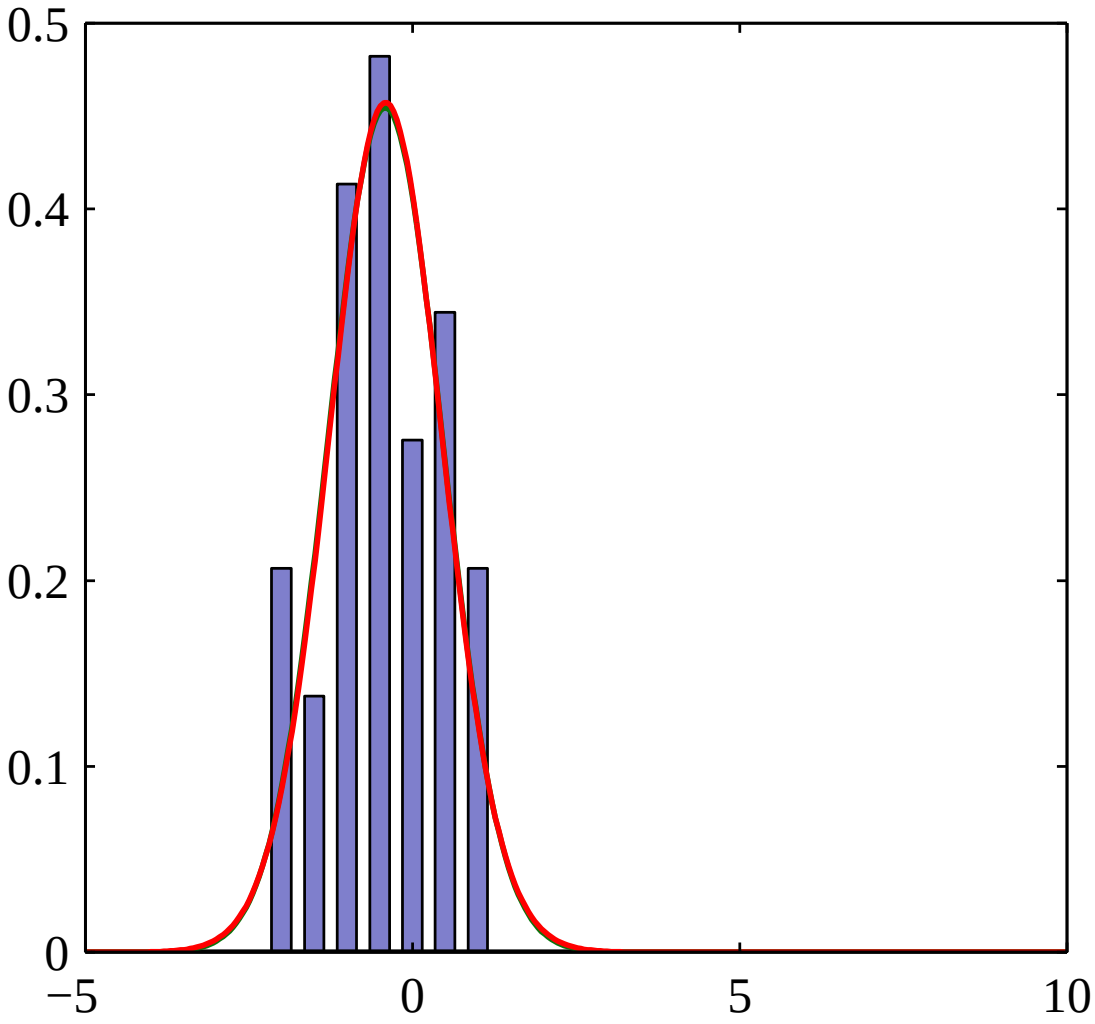


Figure: Chapter 2, Figure 15



(a)

Figure: Chapter 2, Figure 16a

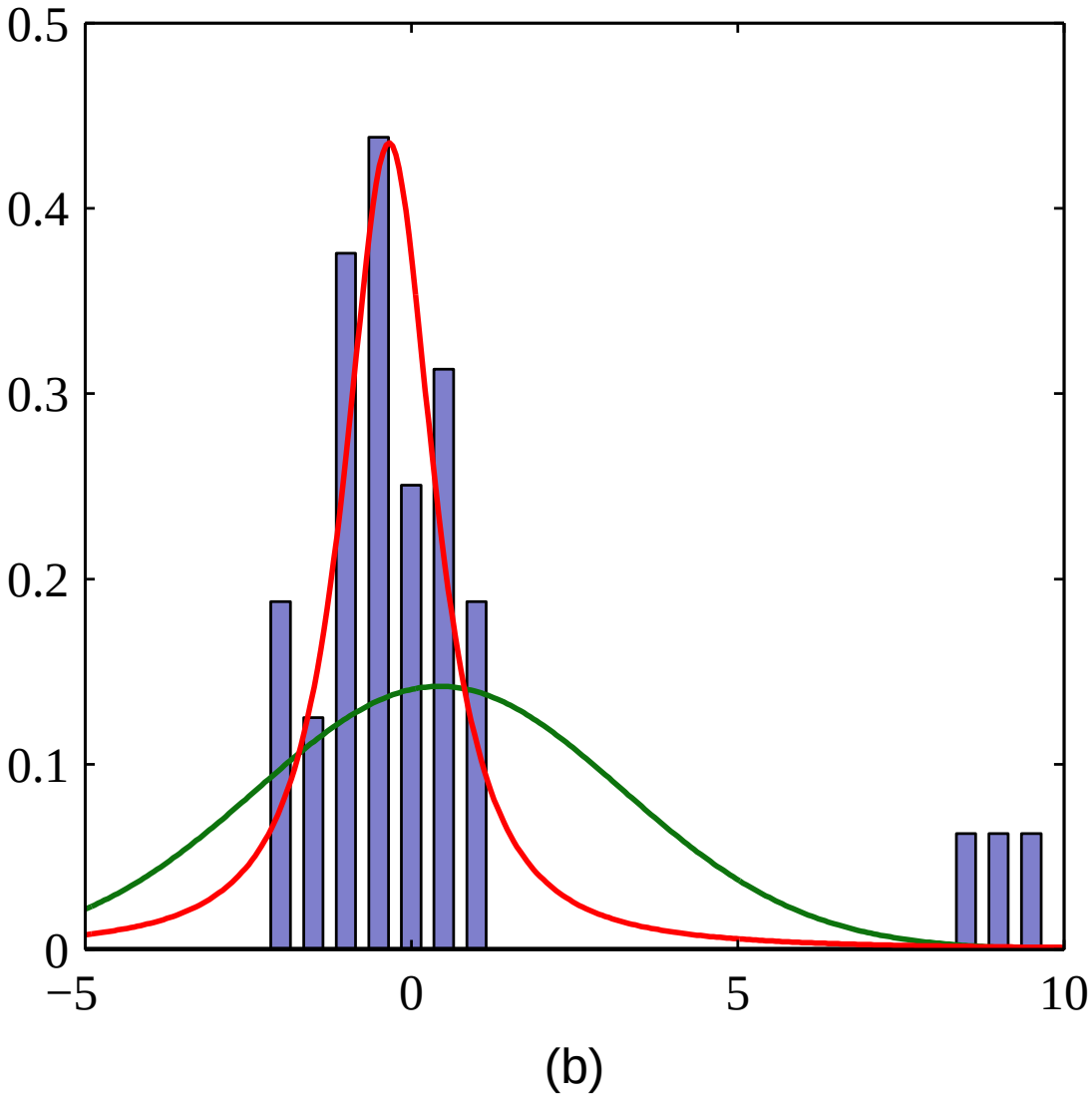


Figure: Chapter 2, Figure 16b

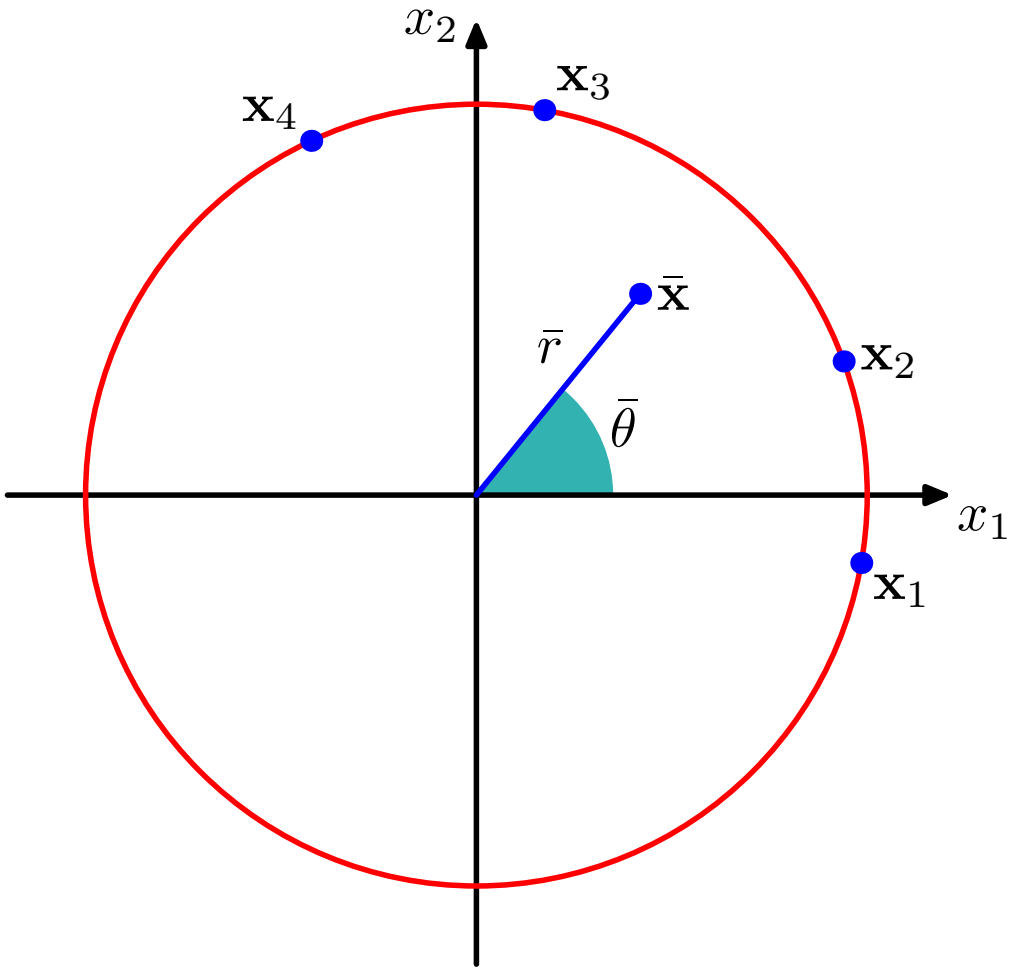


Figure: Chapter 2, Figure 17

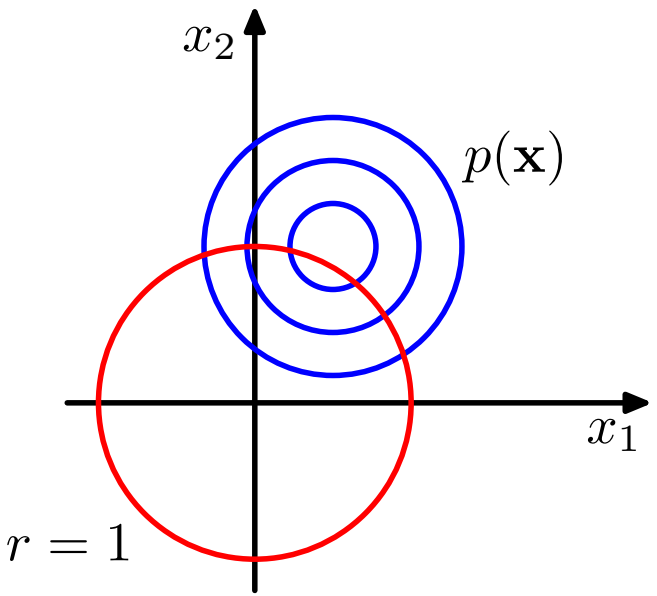


Figure: Chapter 2, Figure 18

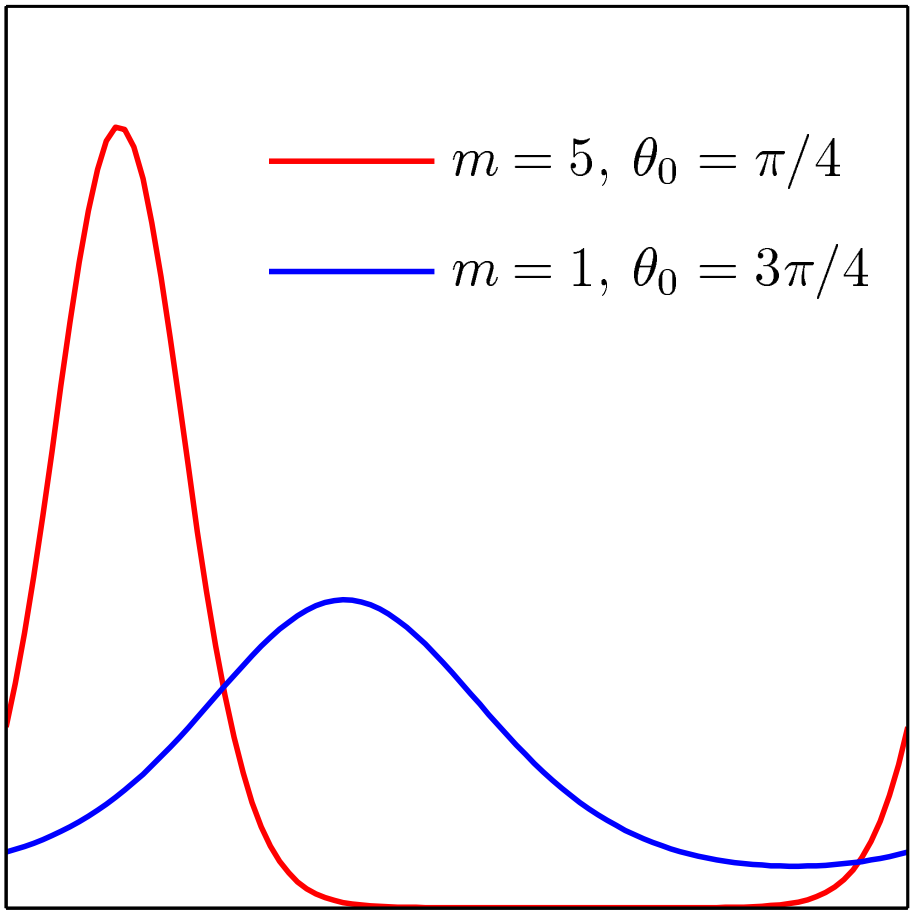


Figure: Chapter 2, Figure 19a

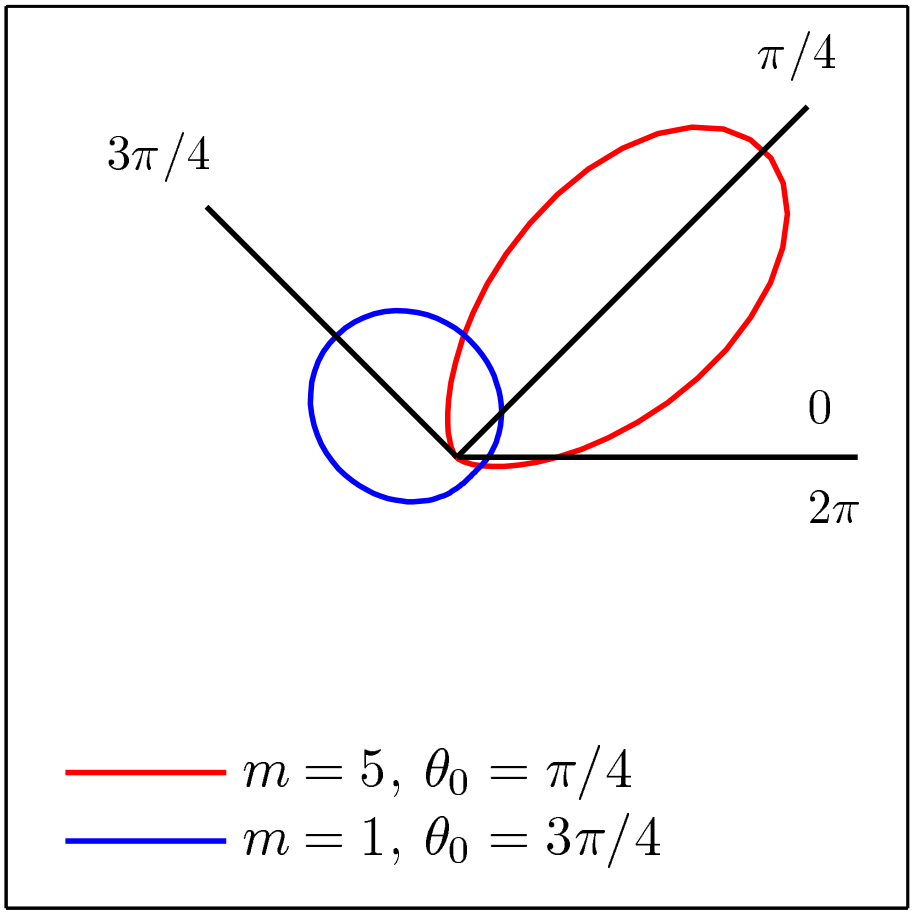


Figure: Chapter 2, Figure 19b

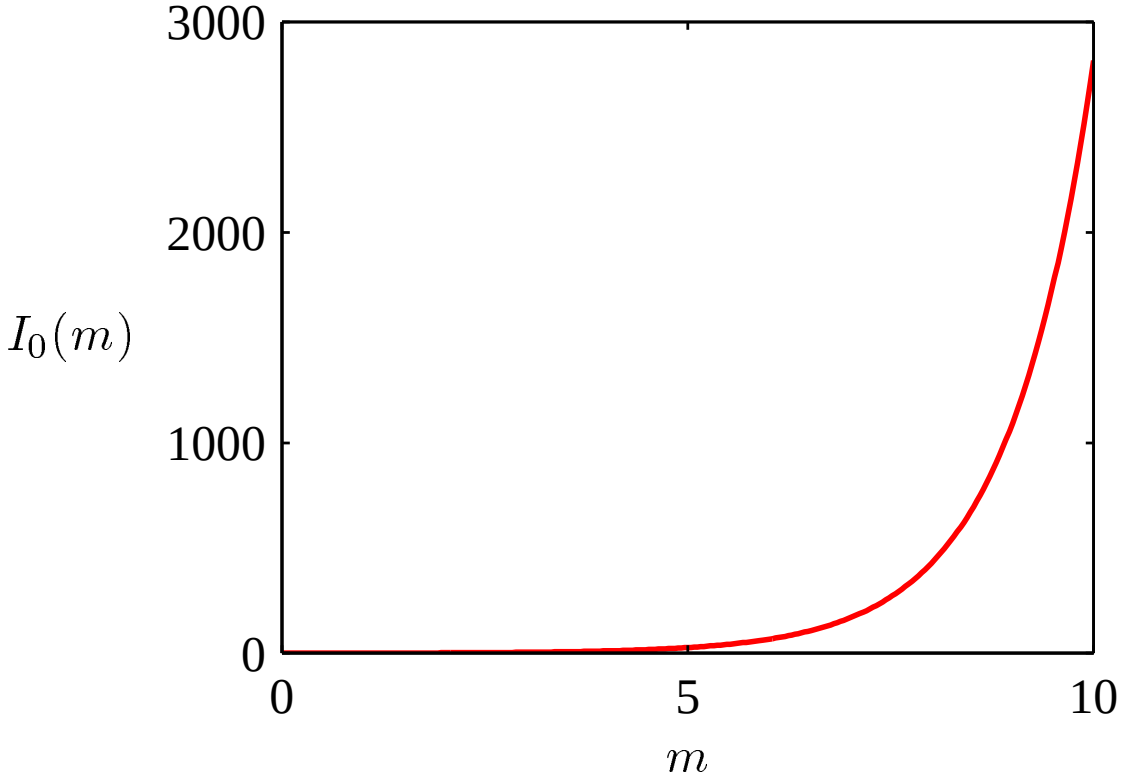


Figure: Chapter 2, Figure 20a

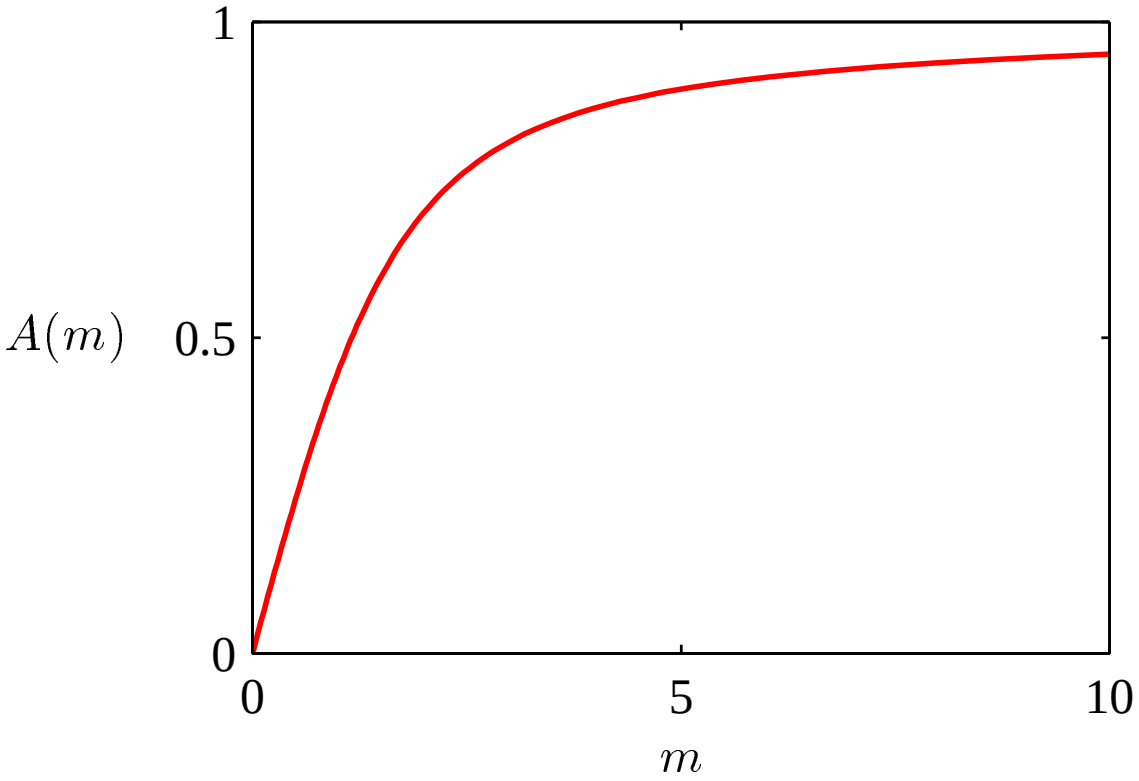


Figure: Chapter 2, Figure 20b

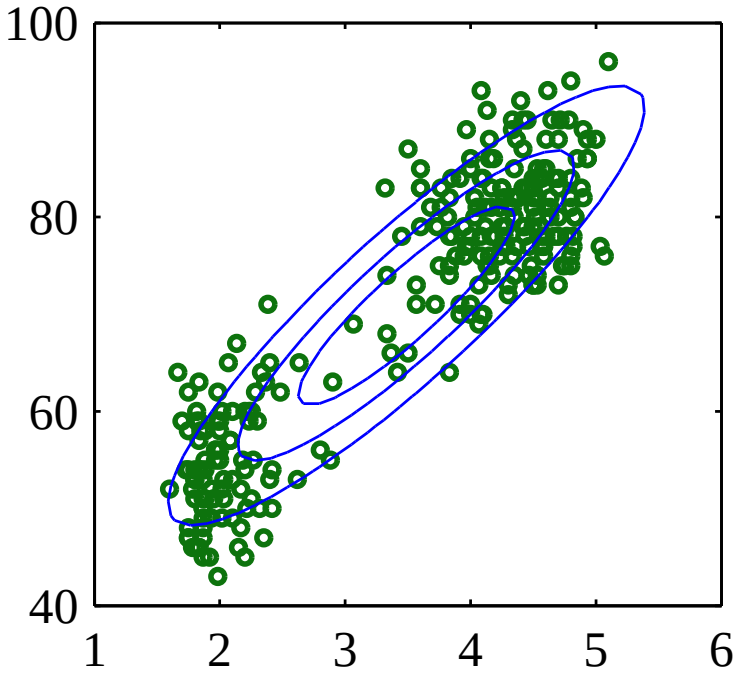


Figure: Chapter 2, Figure 21a

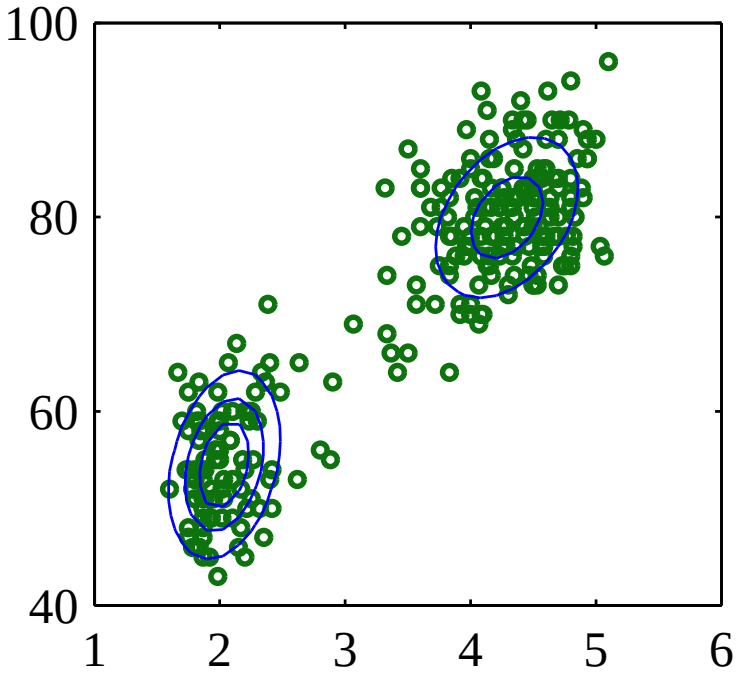


Figure: Chapter 2, Figure 21b

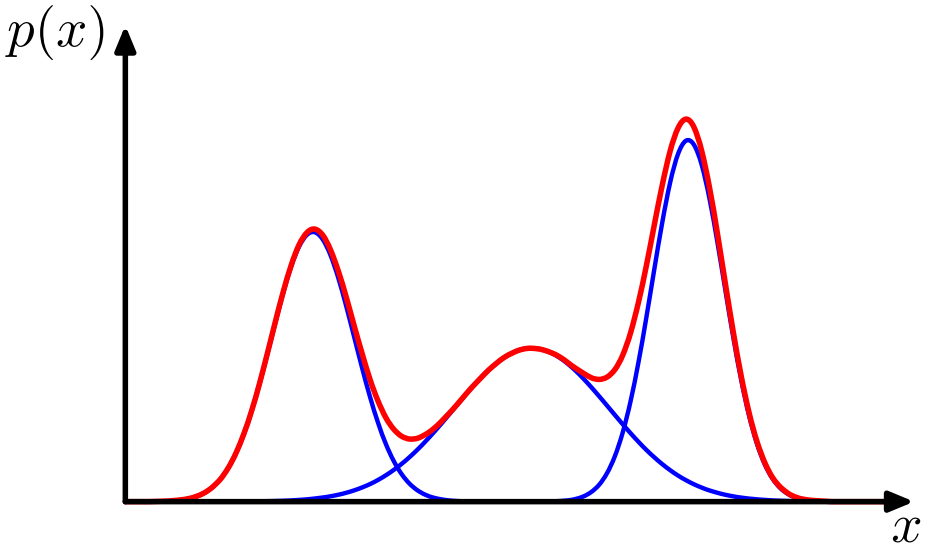


Figure: Chapter 2, Figure 22

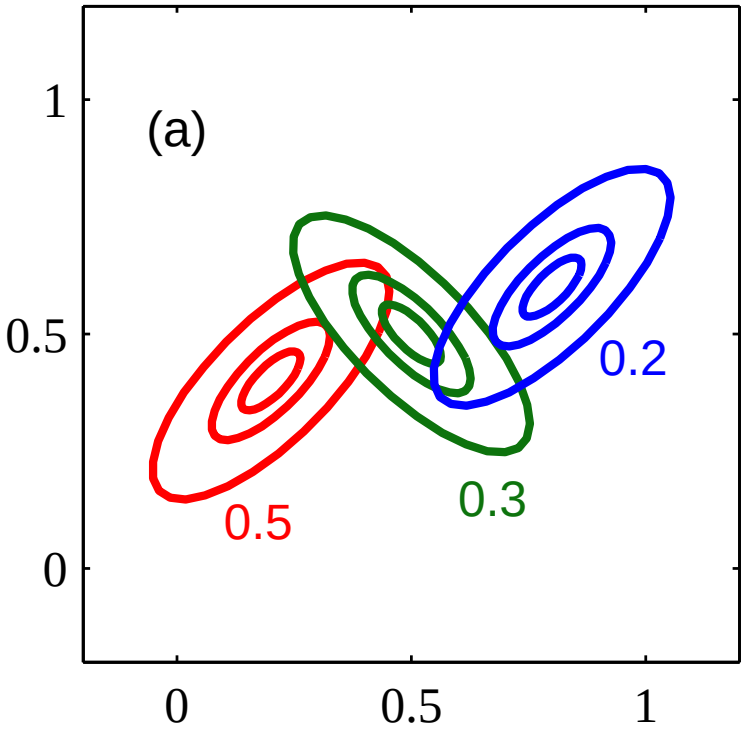
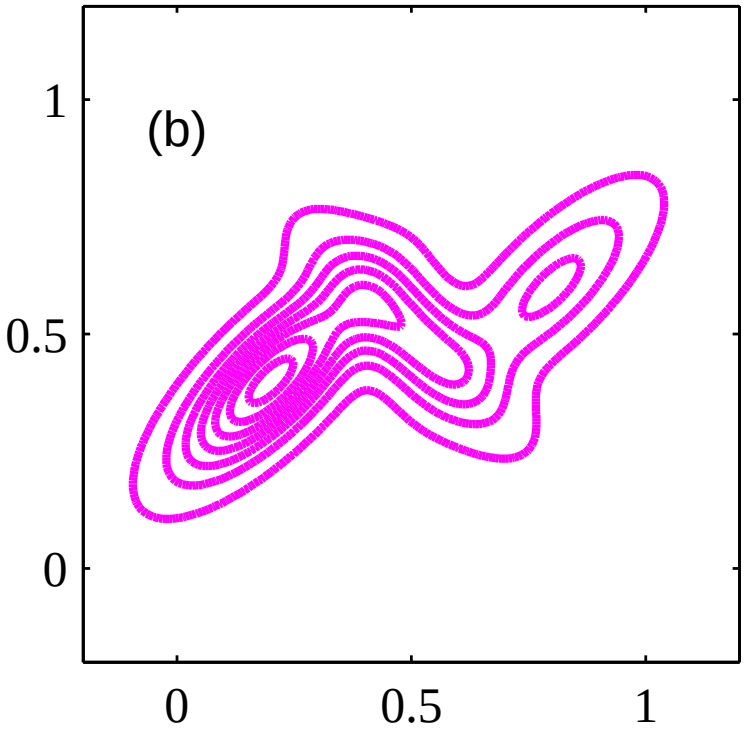


Figure: Chapter 2, Figure 23a



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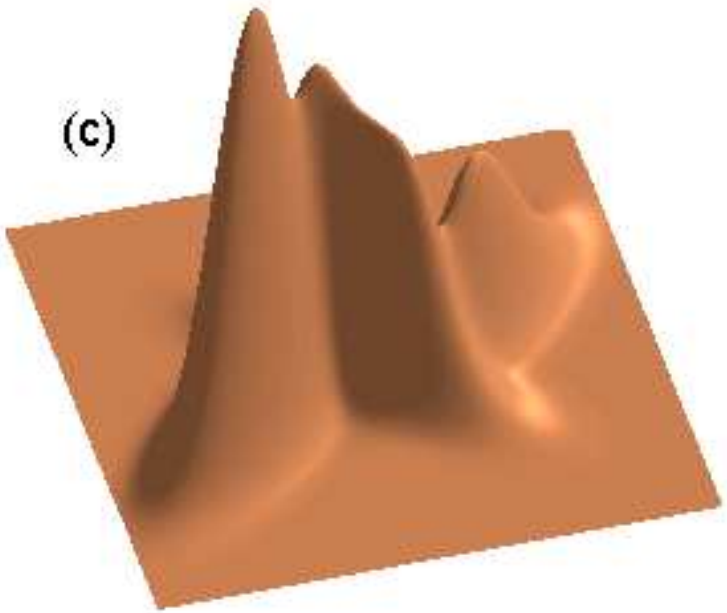


Figure: Chapter 2, Figure 23c

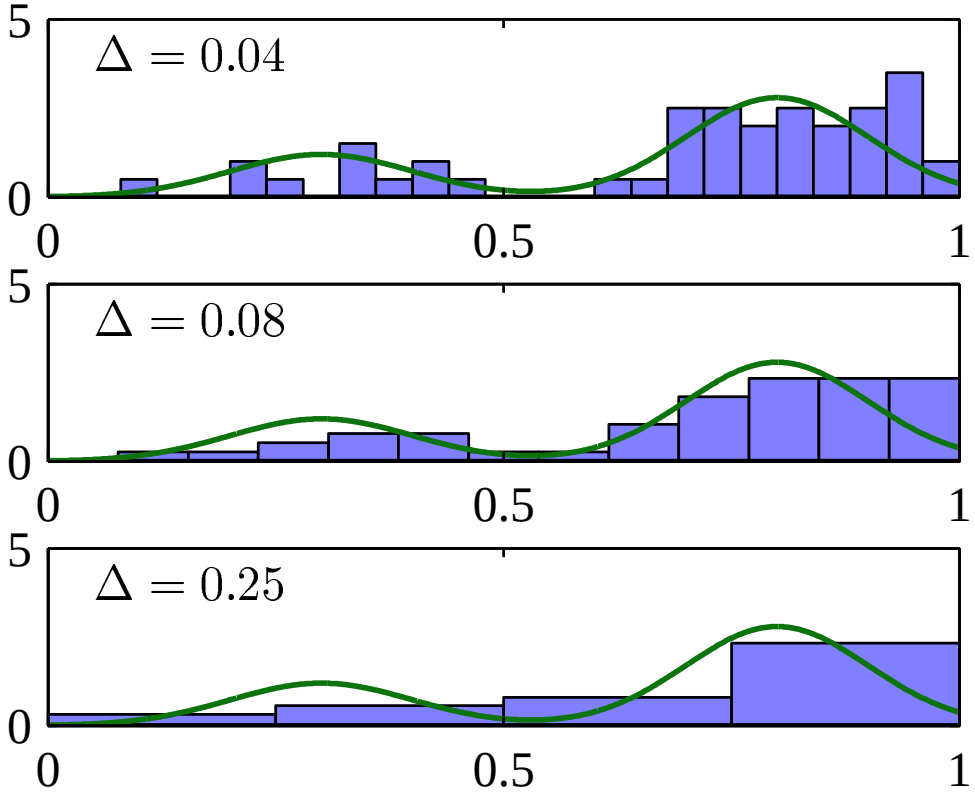


Figure: Chapter 2, Figure 24

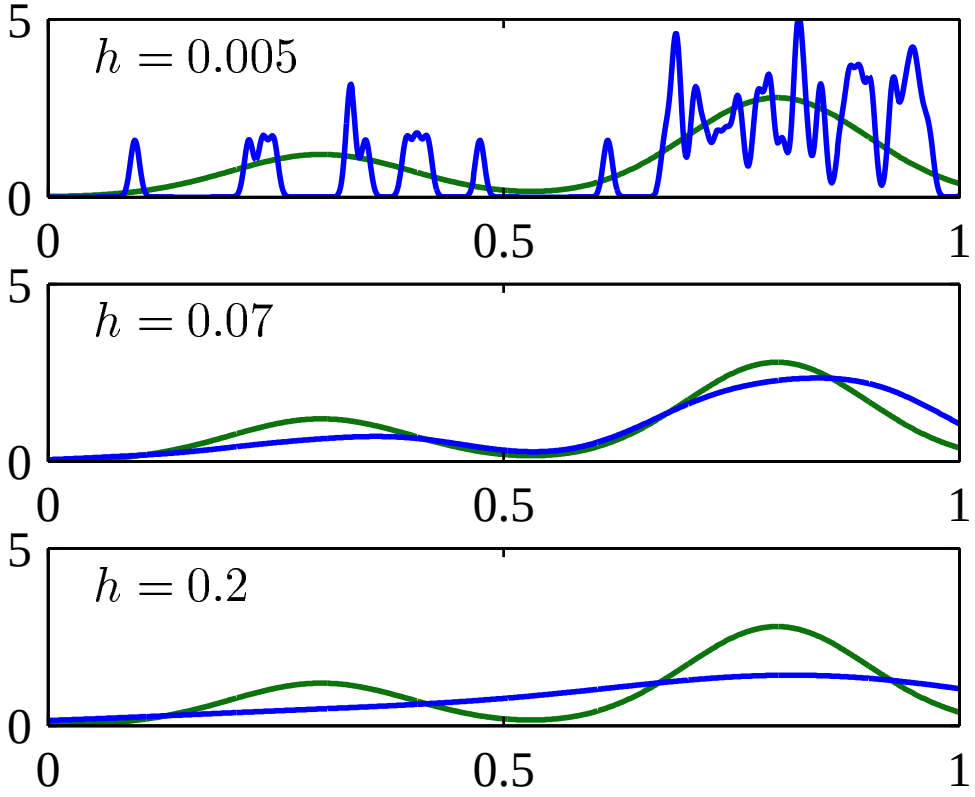


Figure: Chapter 2, Figure 25

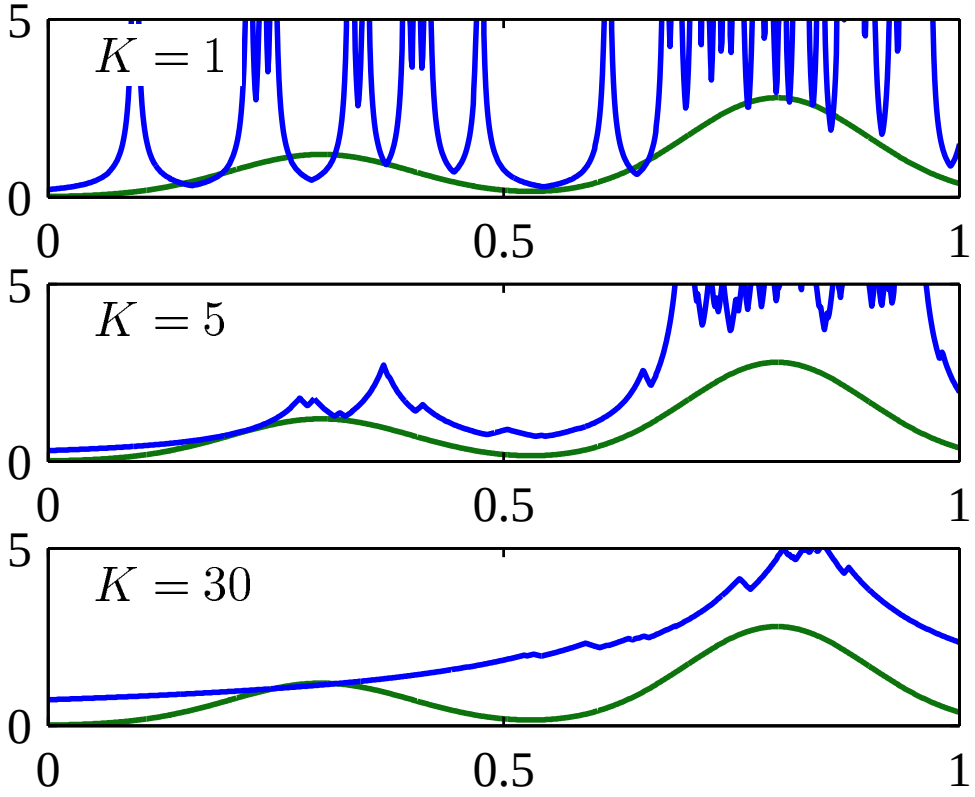
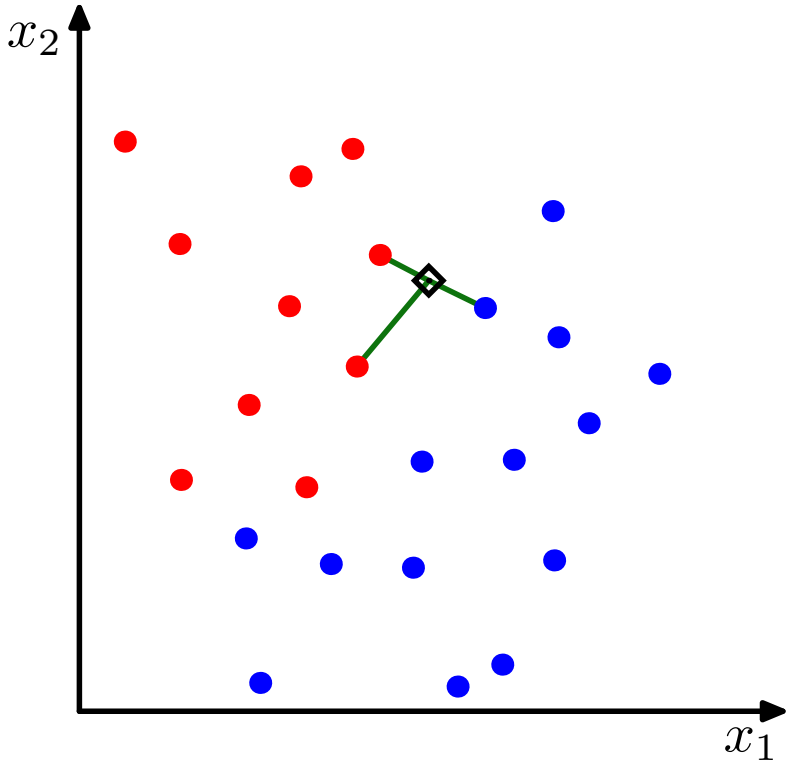
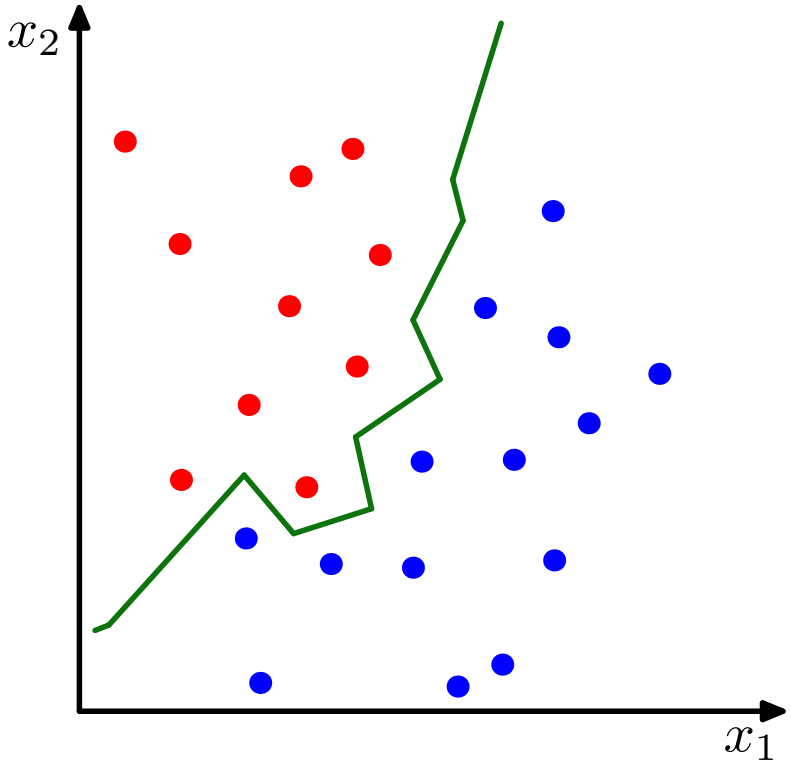


Figure: Chapter 2, Figure 26



(a)

Figure: Chapter 2, Figure 27a



(b)

Figure: Chapter 2, Figure 27b

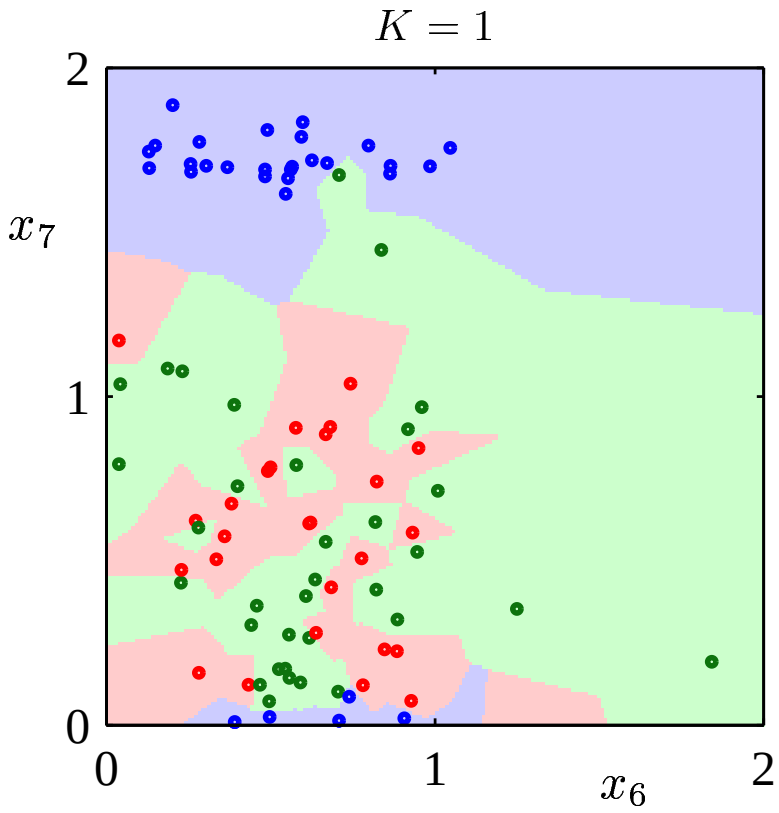


Figure: Chapter 2, Figure 28a

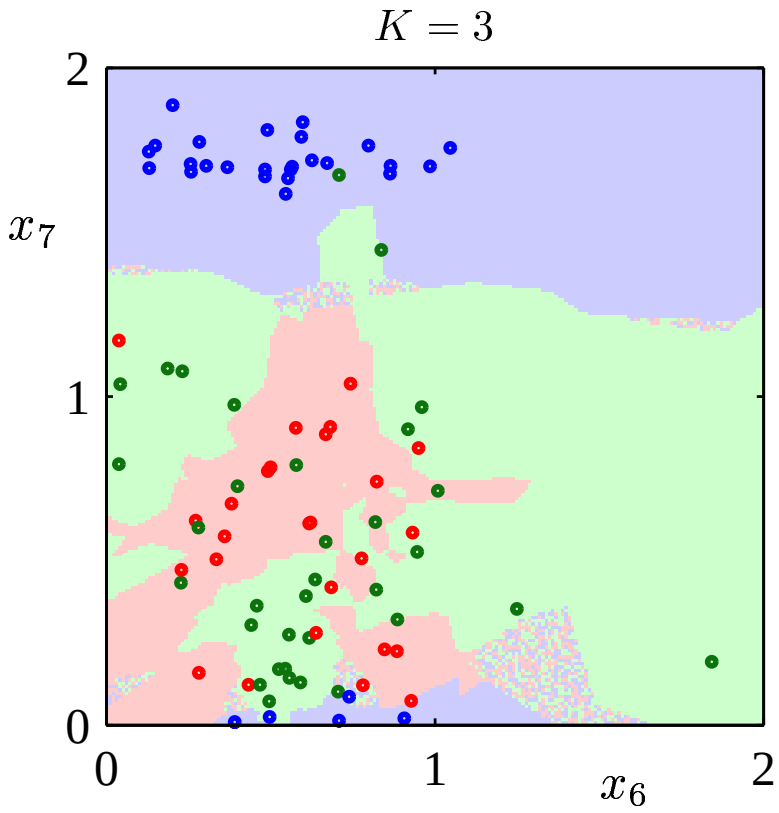


Figure: Chapter 2, Figure 28b

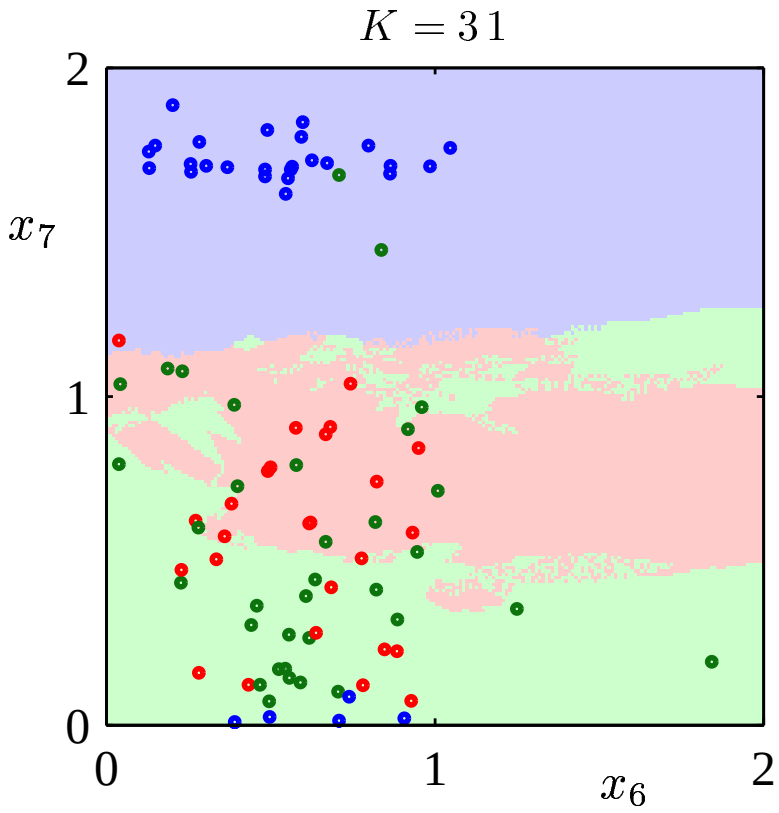


Figure: Chapter 2, Figure 28c

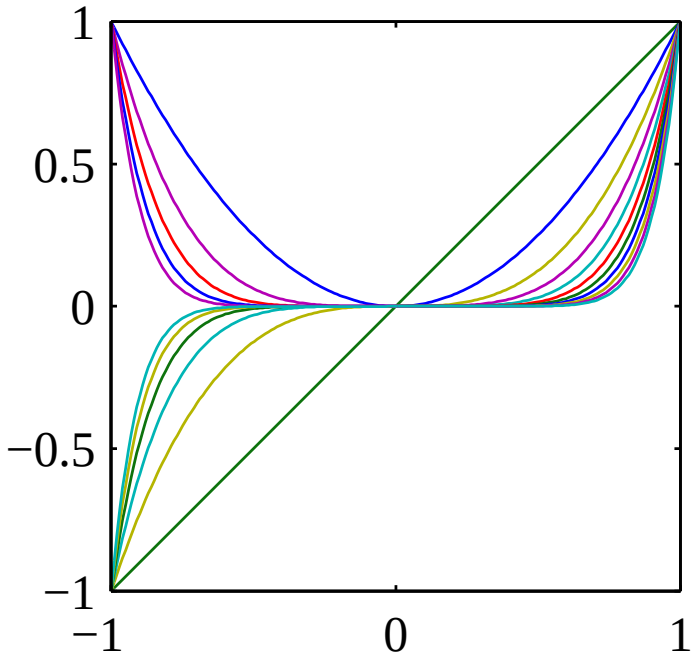


Figure: Chapter 3, Figure 1a

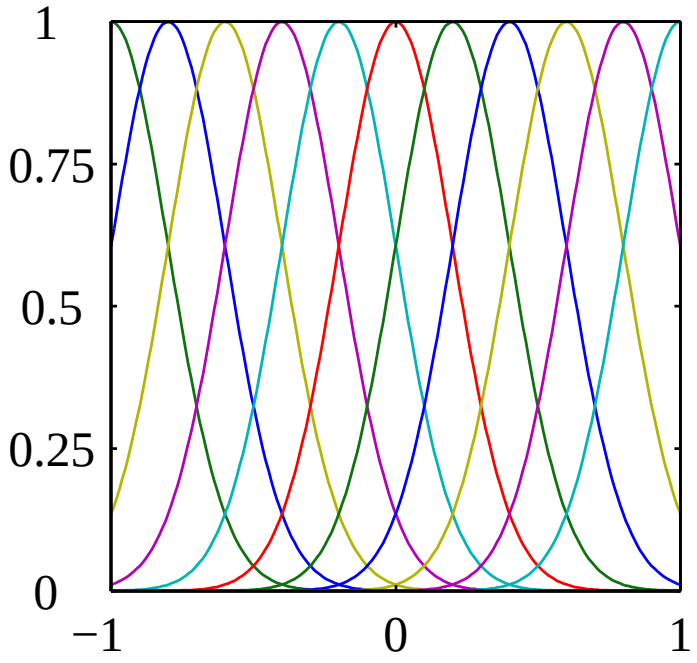
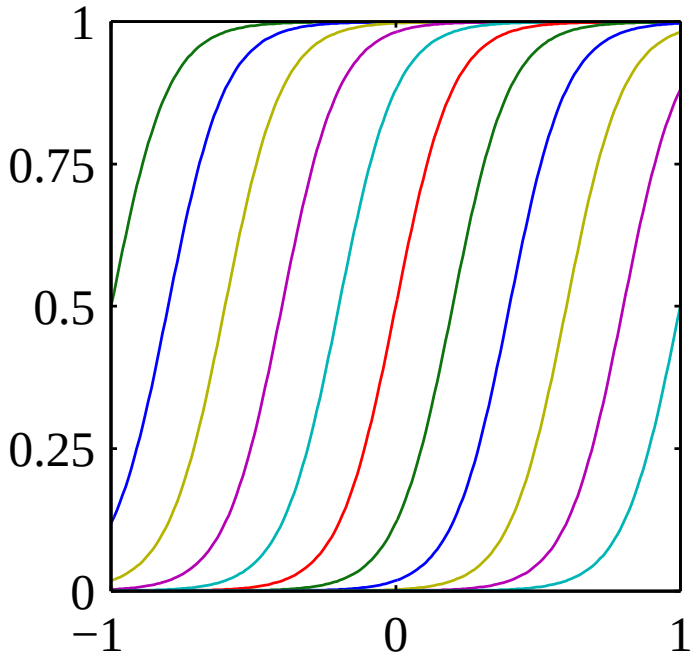


Figure: Chapter 3, Figure 1b



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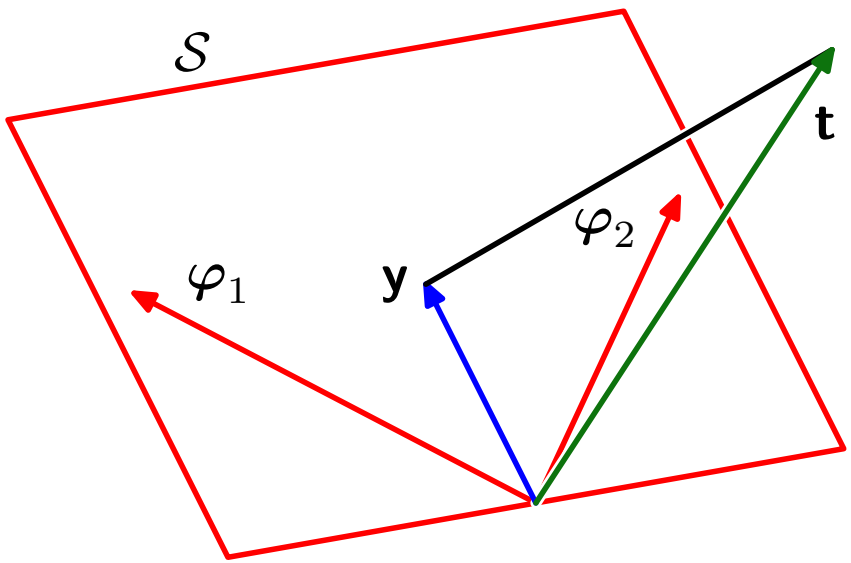


Figure: Chapter 3, Figure 2

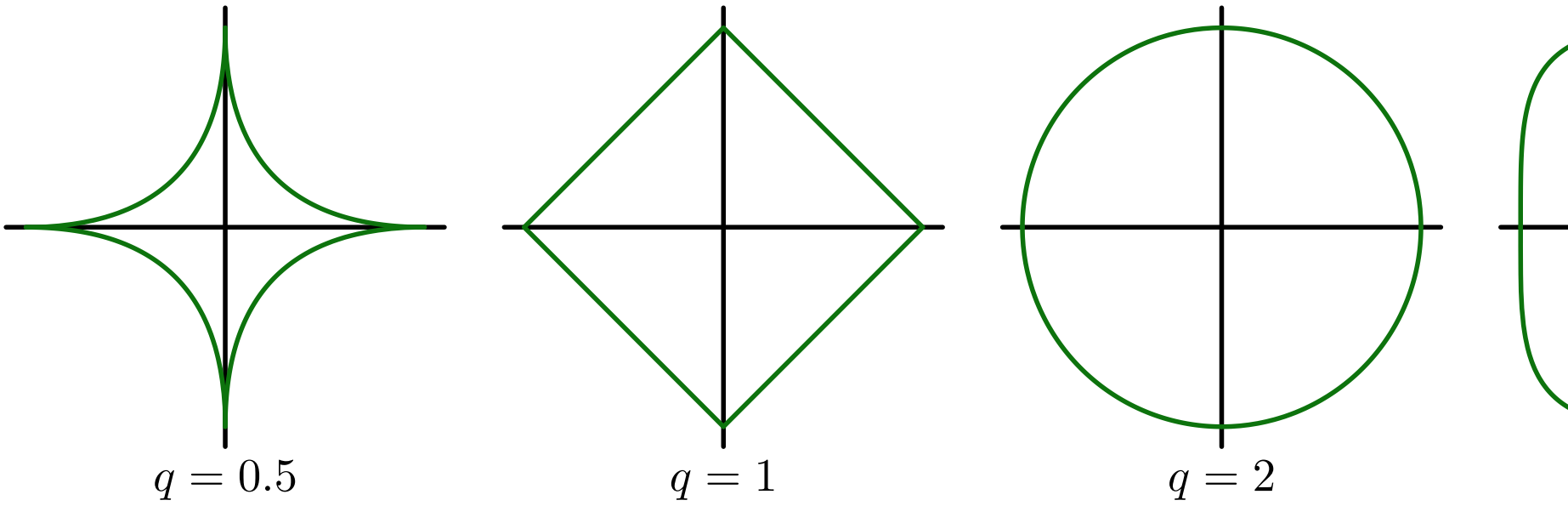


Figure: Chapter 3, Figure 3

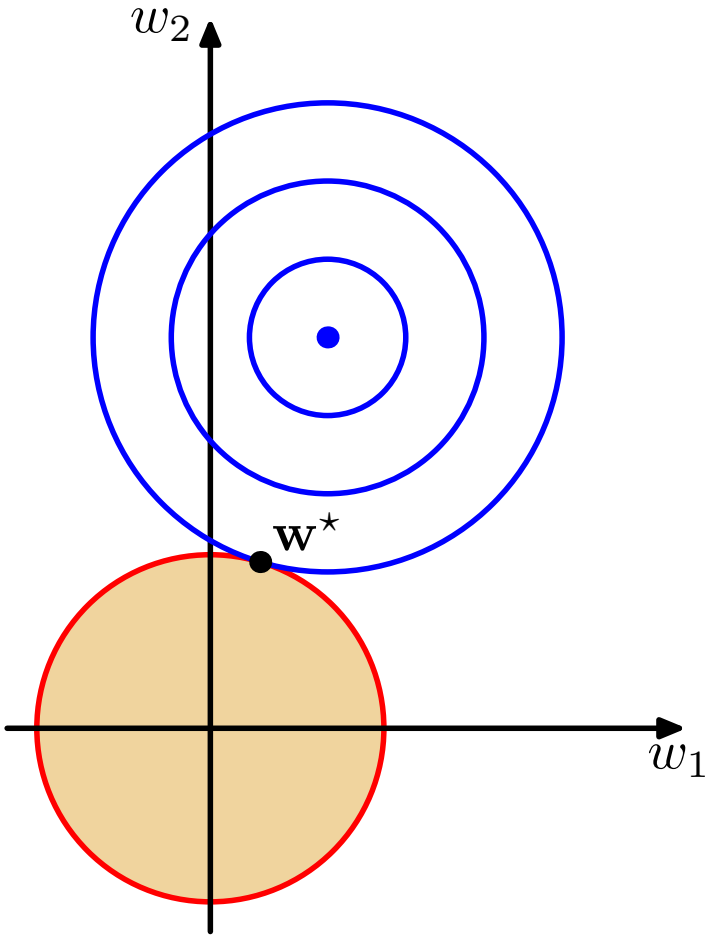


Figure: Chapter 3, Figure 4a

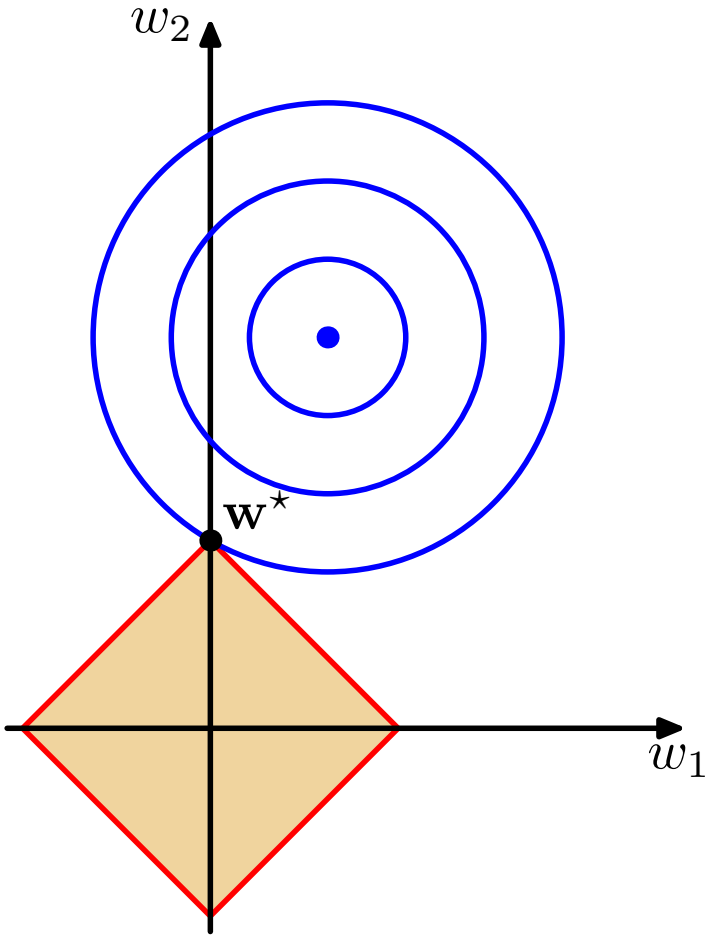


Figure: Chapter 3, Figure 4b

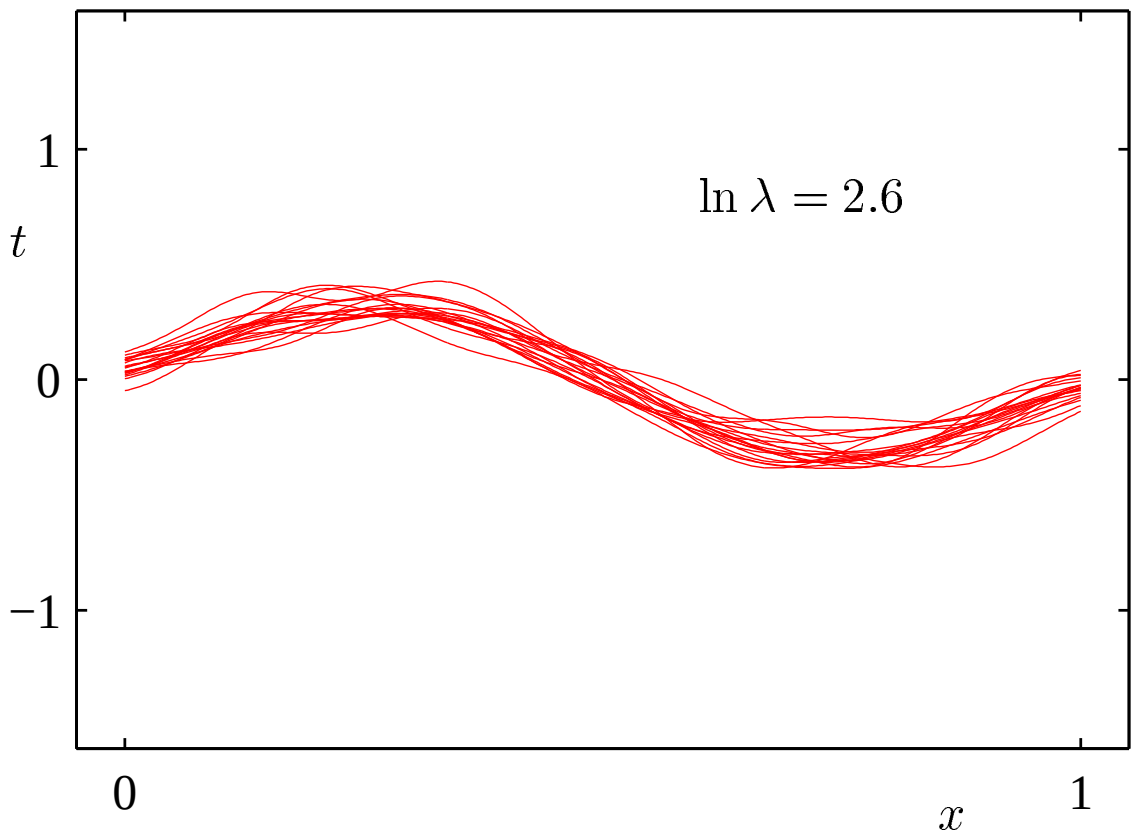


Figure: Chapter 3, Figure 5a

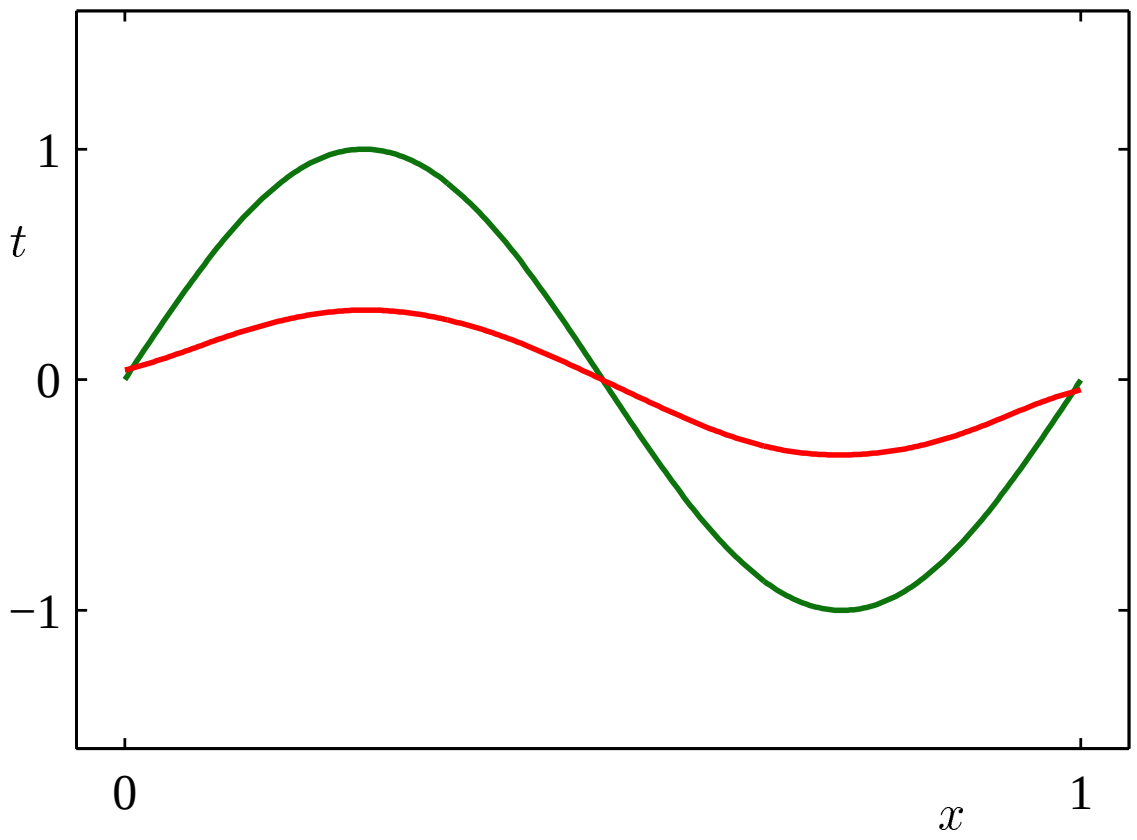


Figure: Chapter 3, Figure 5b

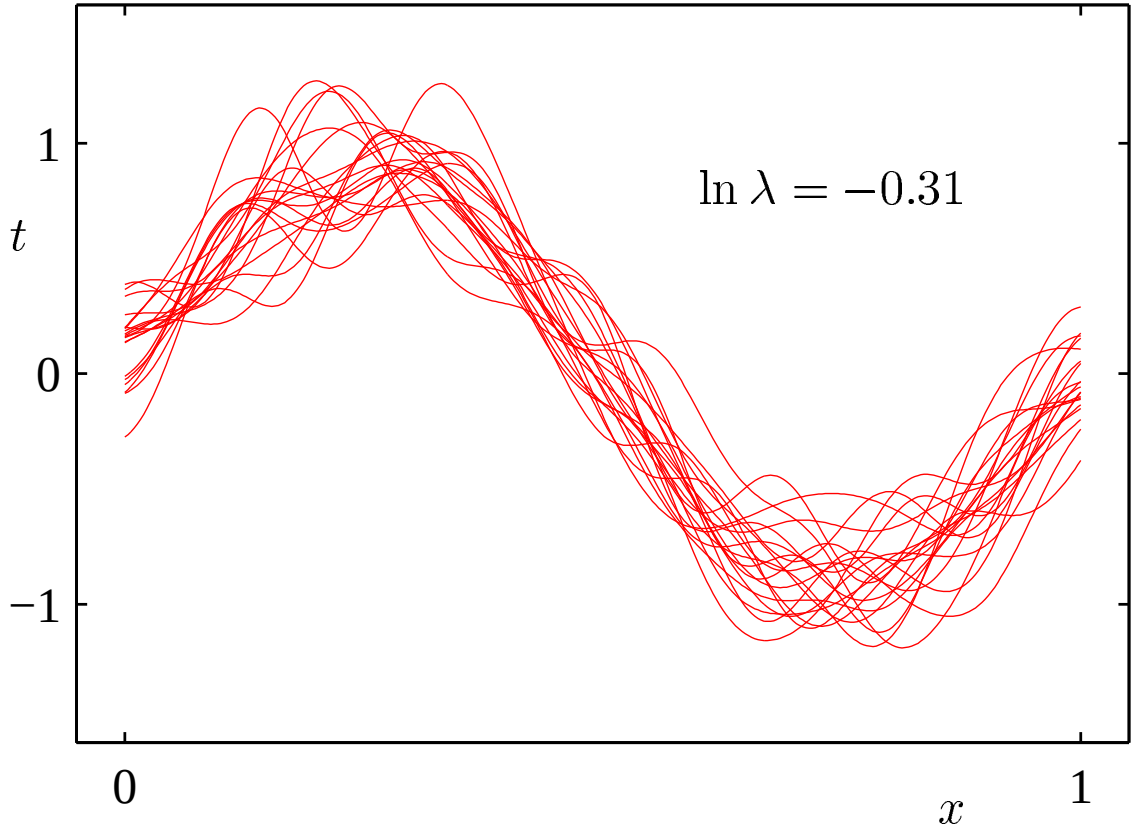


Figure: Chapter 3, Figure 5c

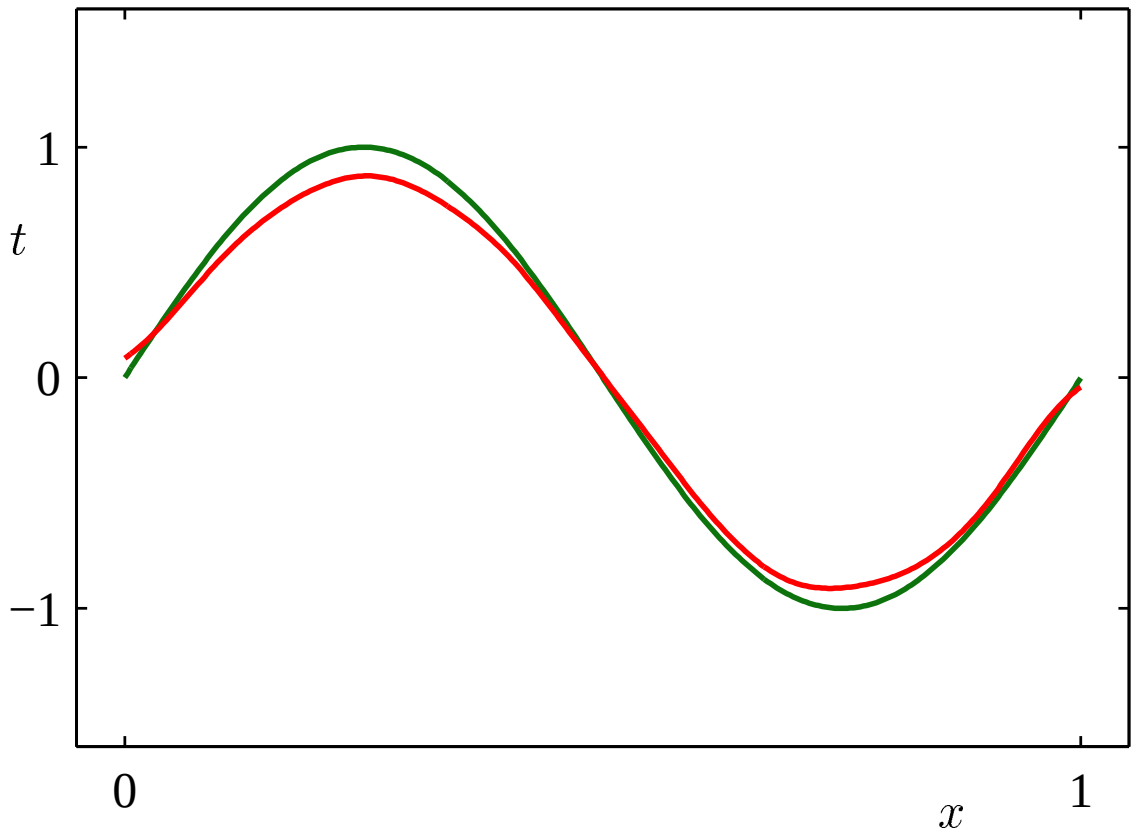
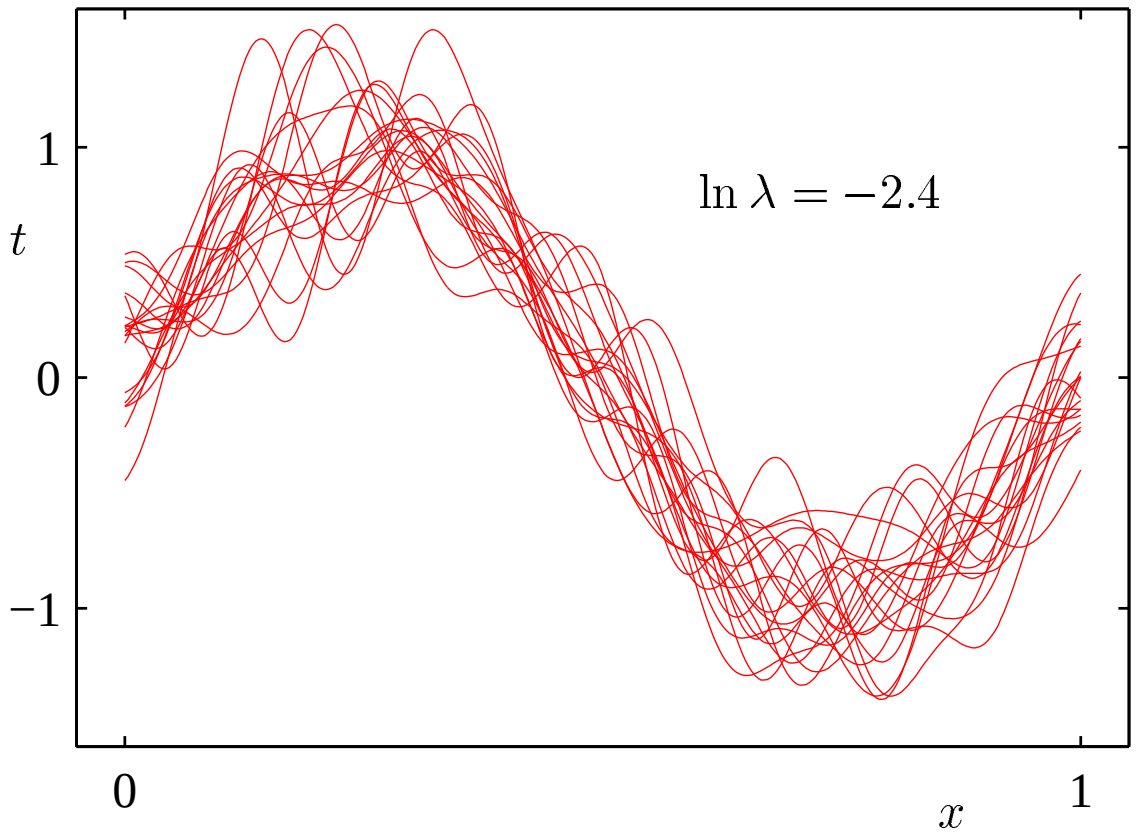


Figure: Chapter 3, Figure 5d



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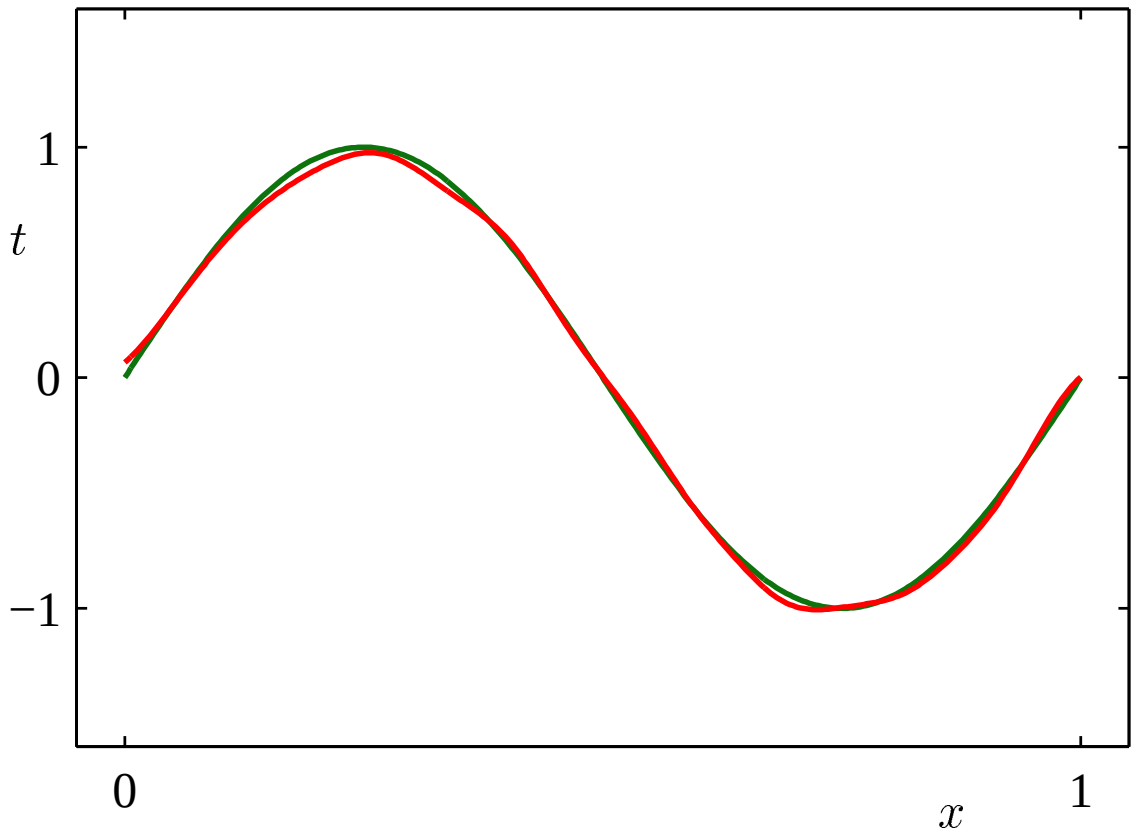

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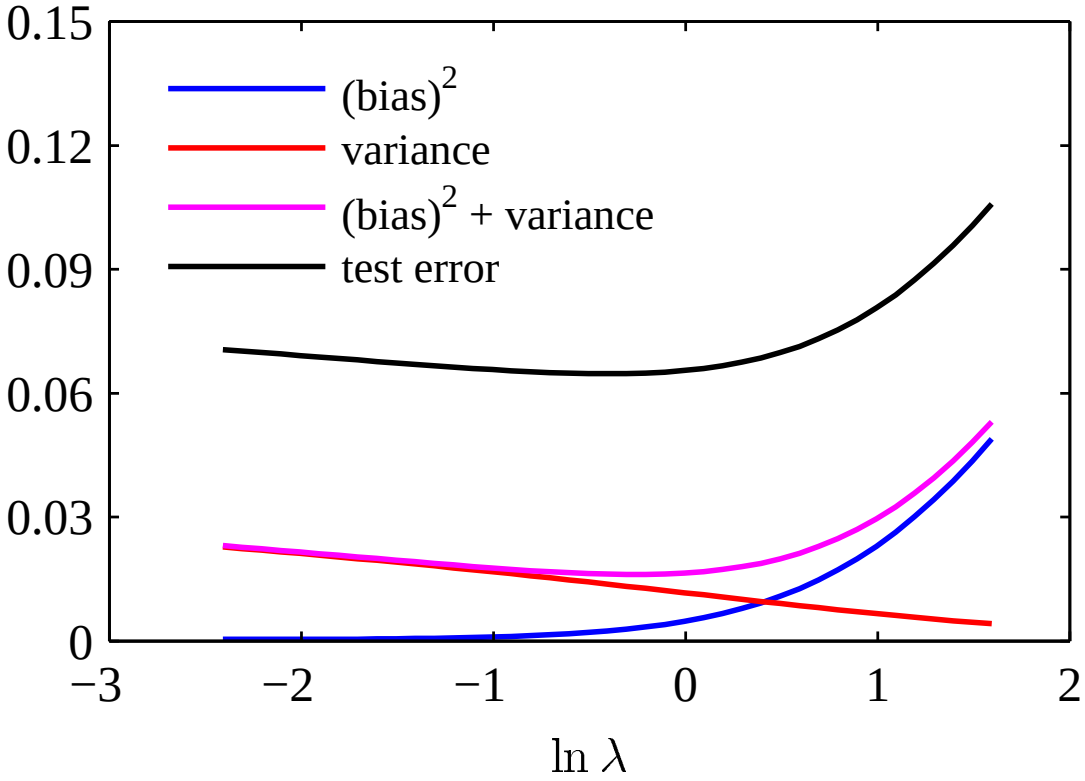

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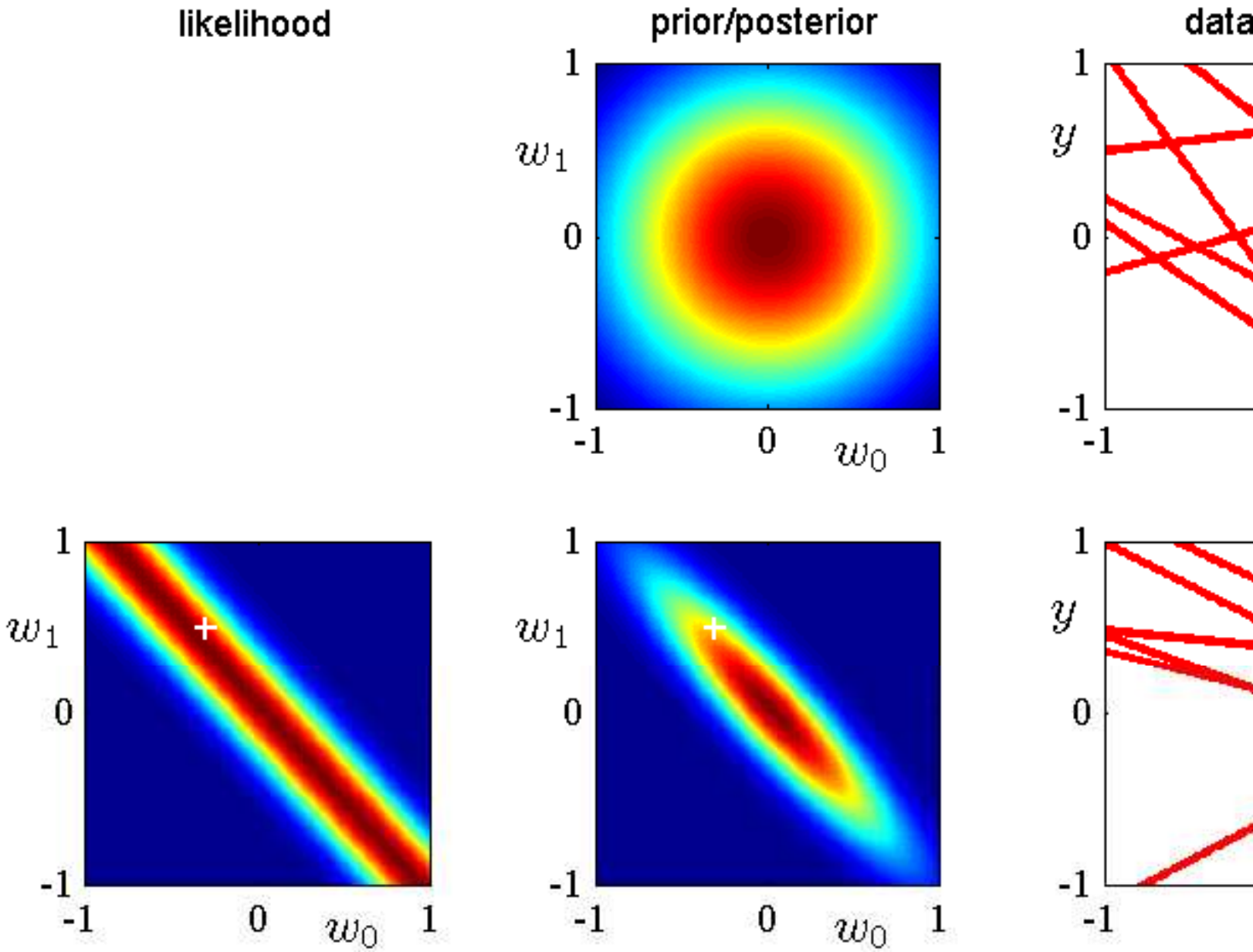
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prior/posterior
data
w_1
w_0
y
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0
-1

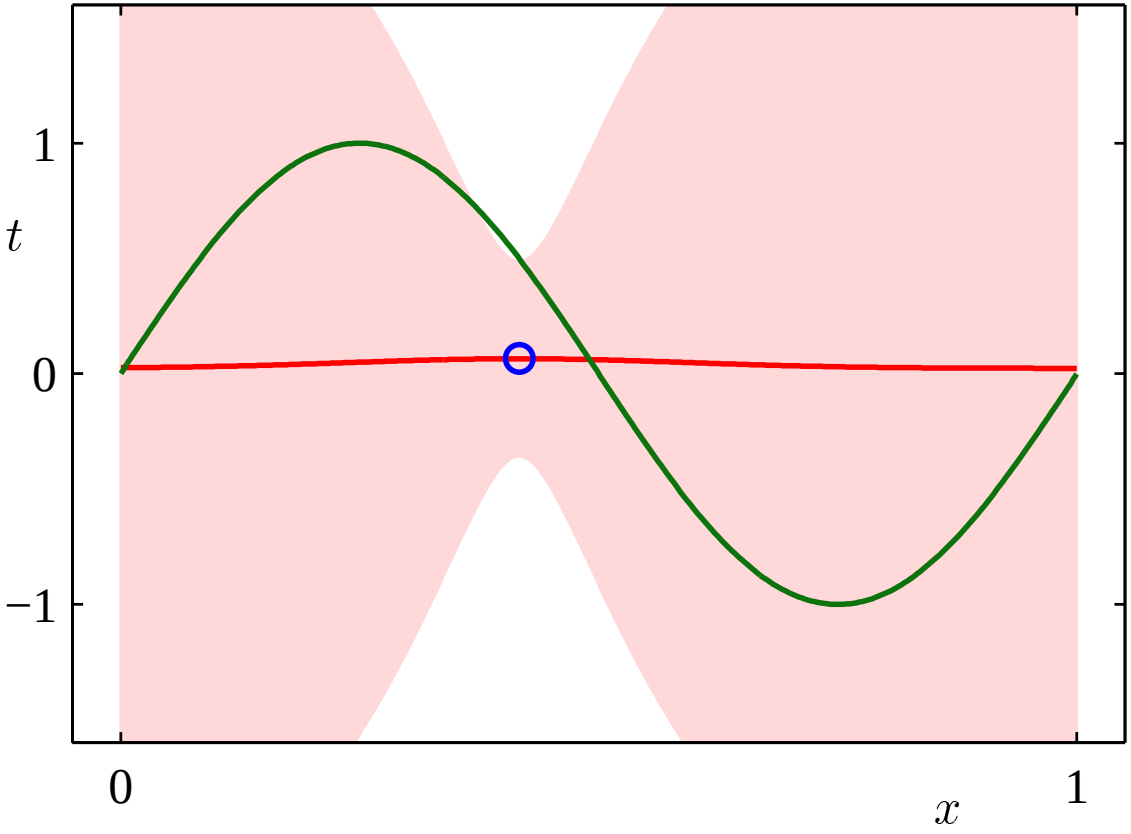
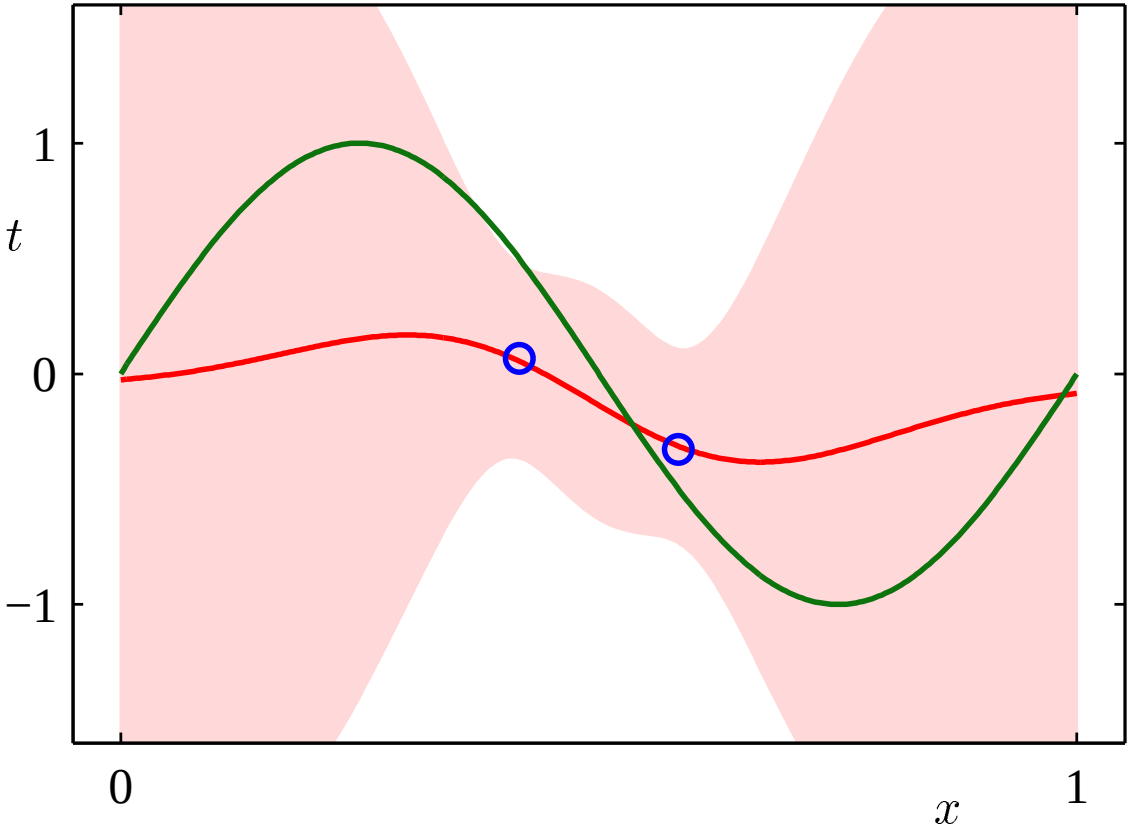


Figure: Chapter 3, Figure 8a



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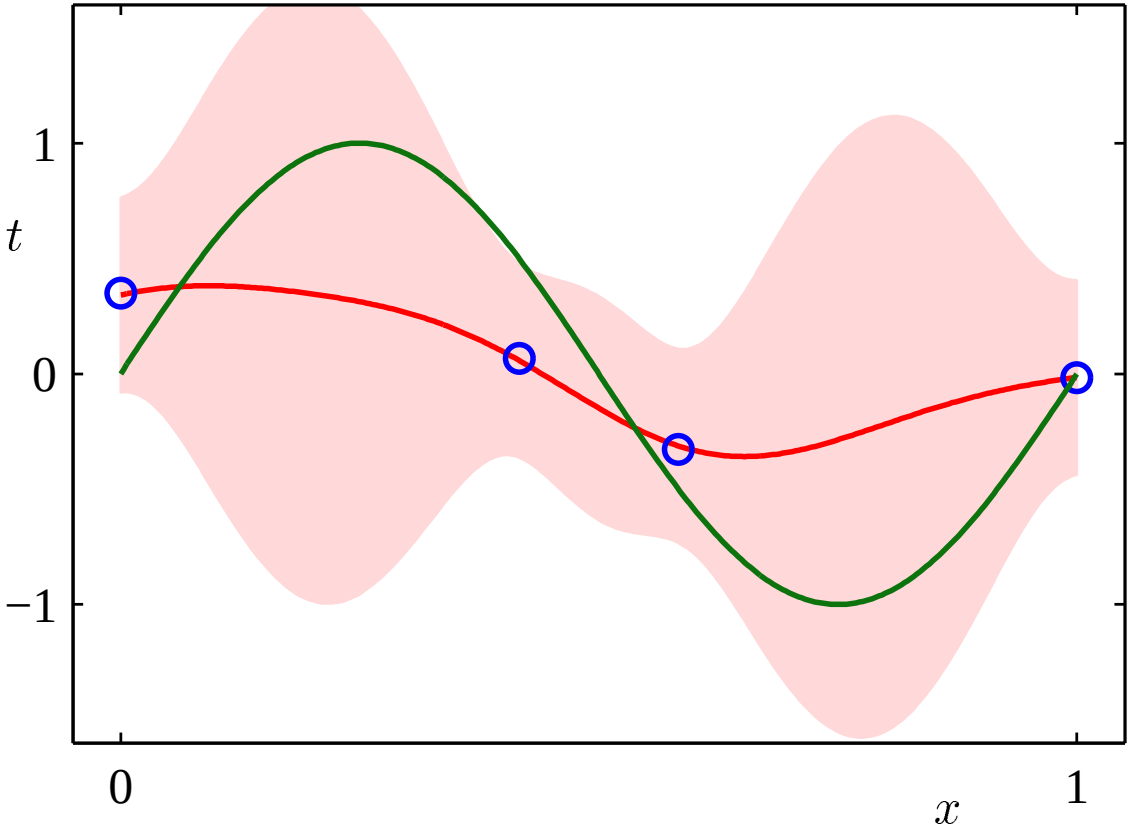

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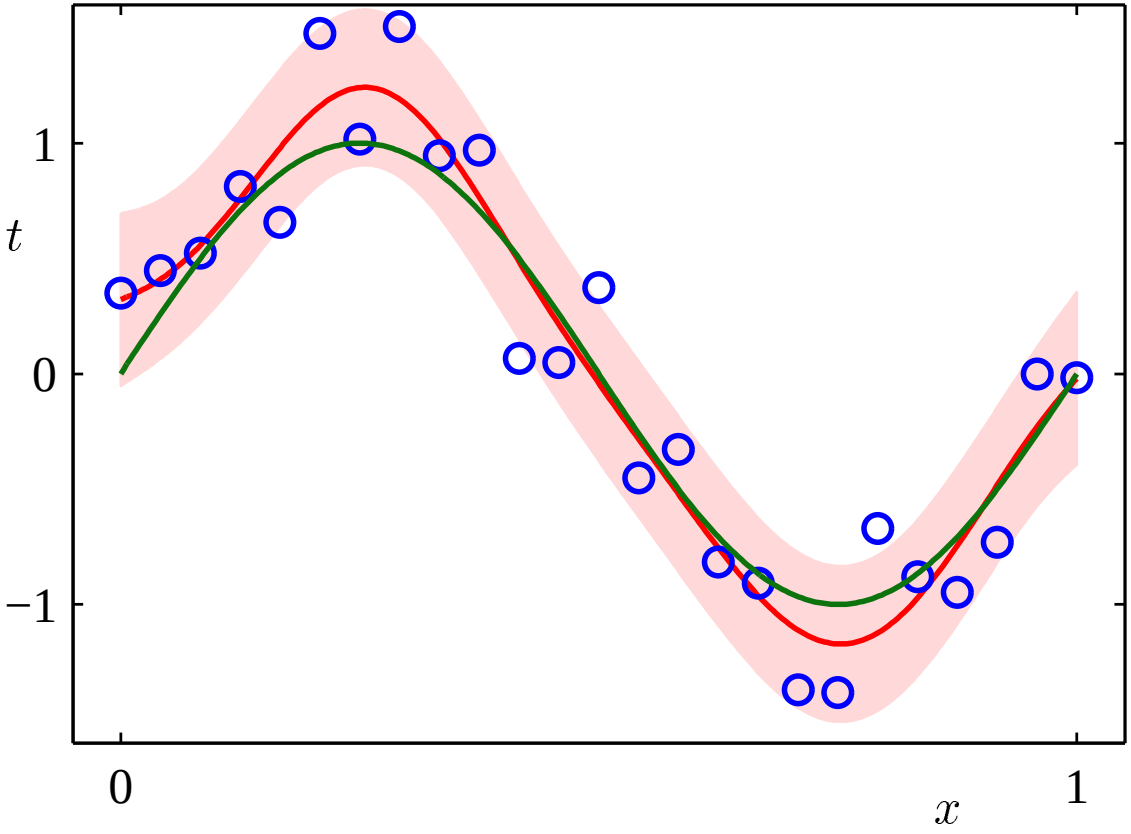


Figure: Chapter 3, Figure 8d

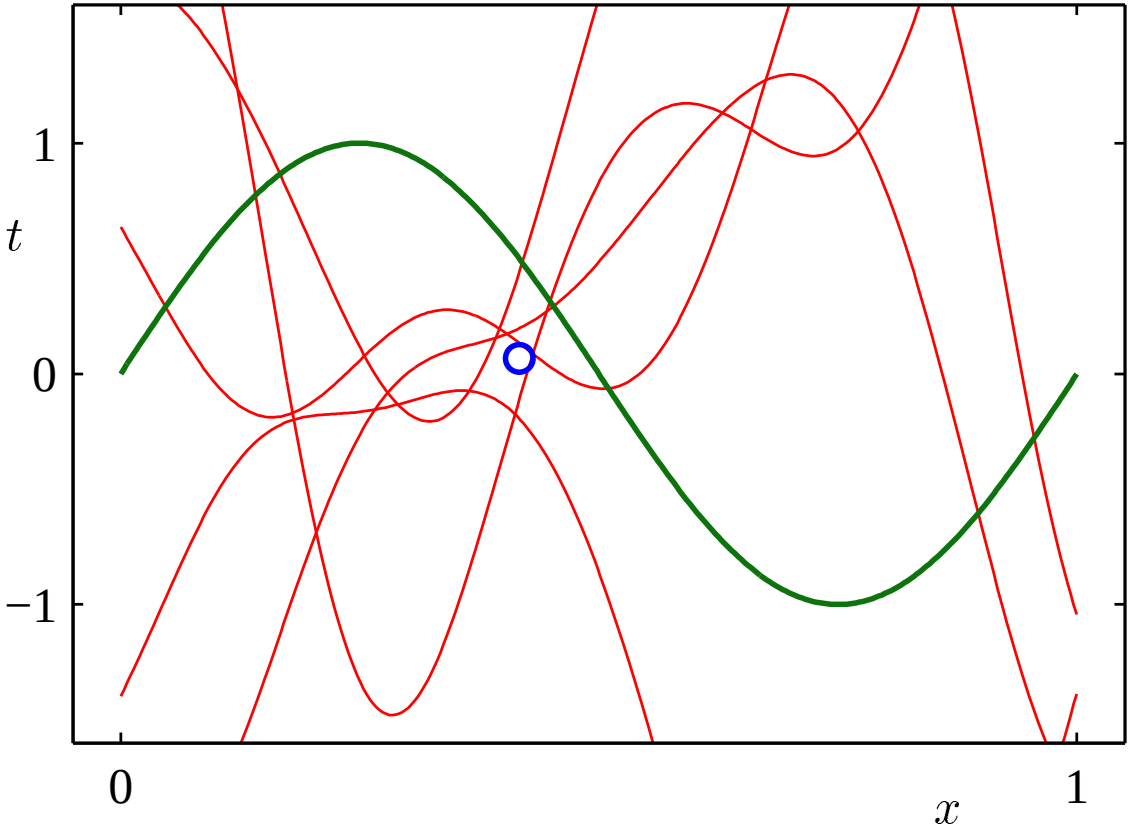
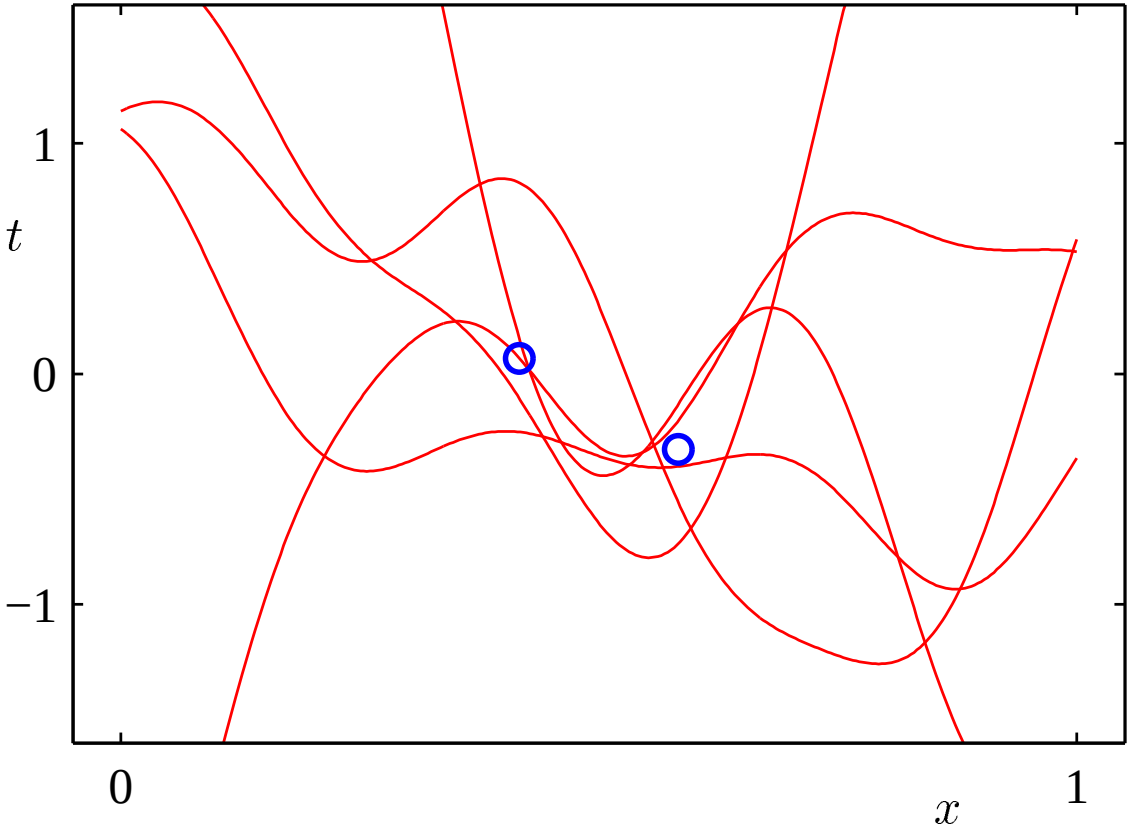


Figure: Chapter 3, Figure 9a



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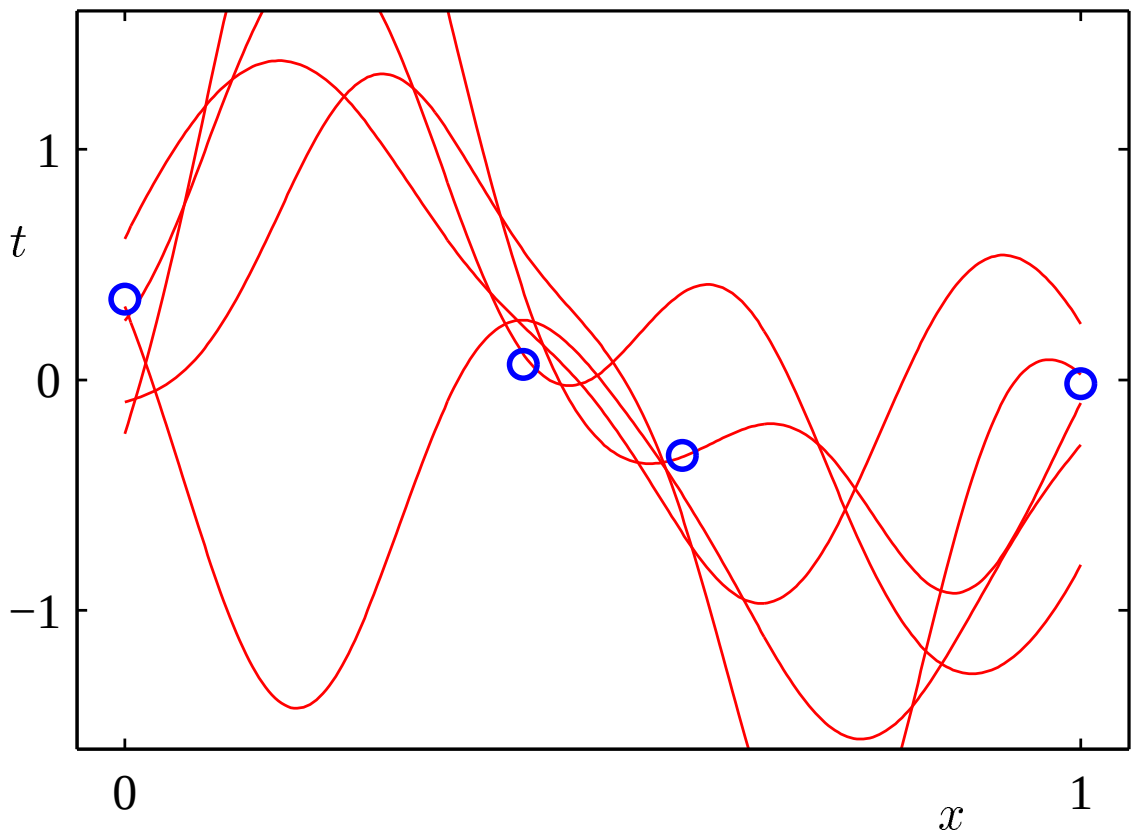

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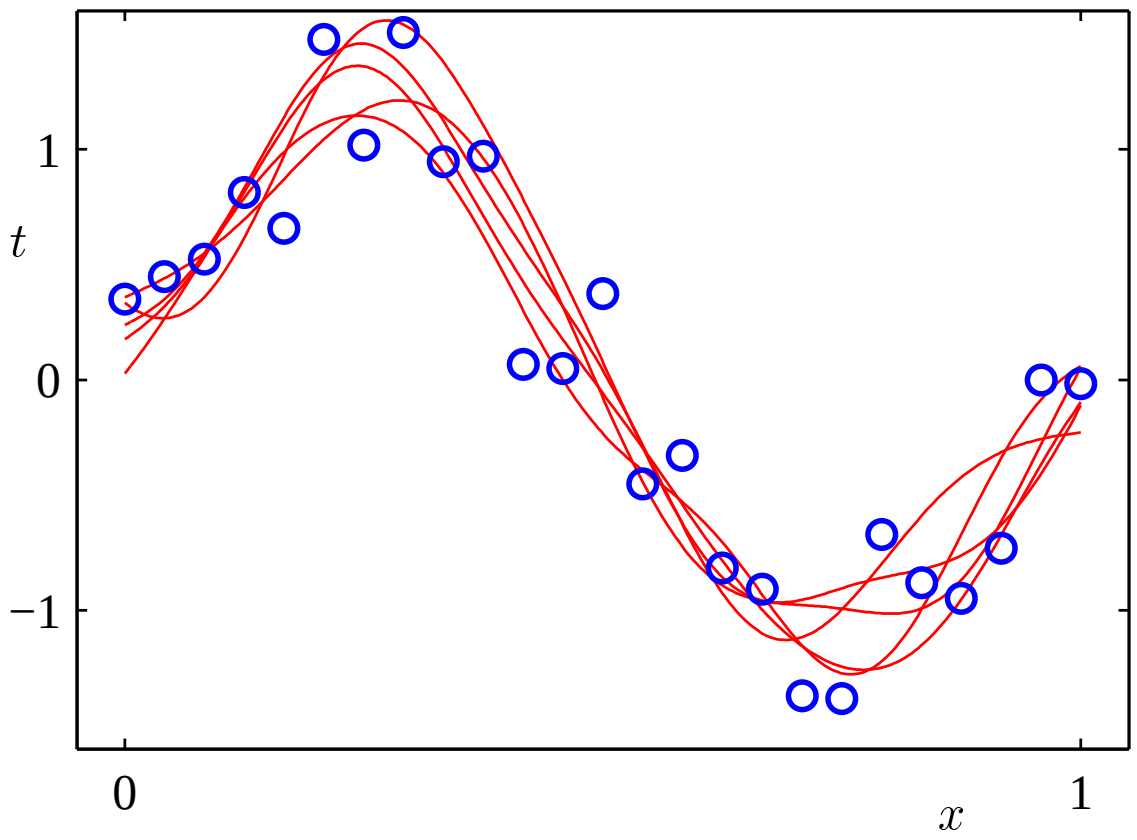

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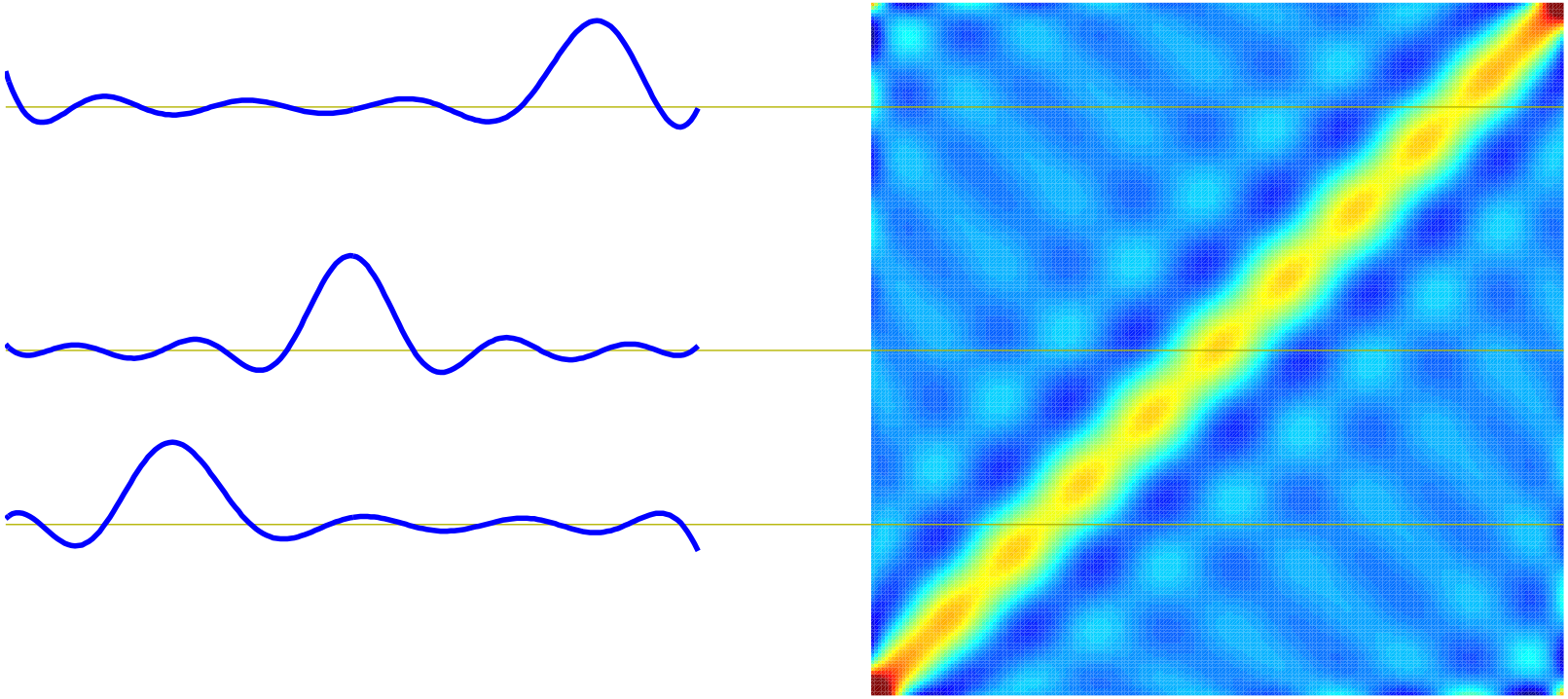


Figure: Chapter 3, Figure 10

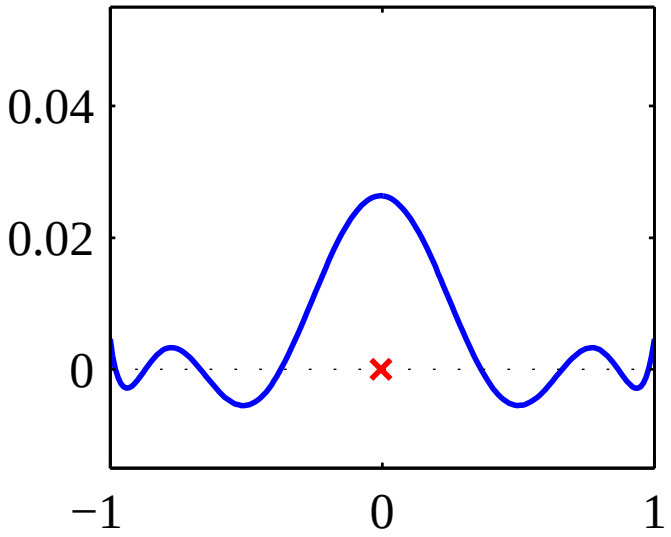


Figure: Chapter 3, Figure 11a

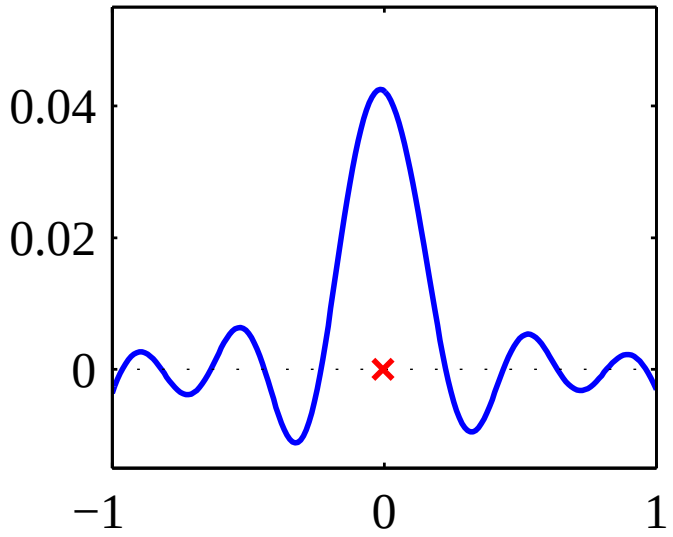


Figure: Chapter 3, Figure 11b

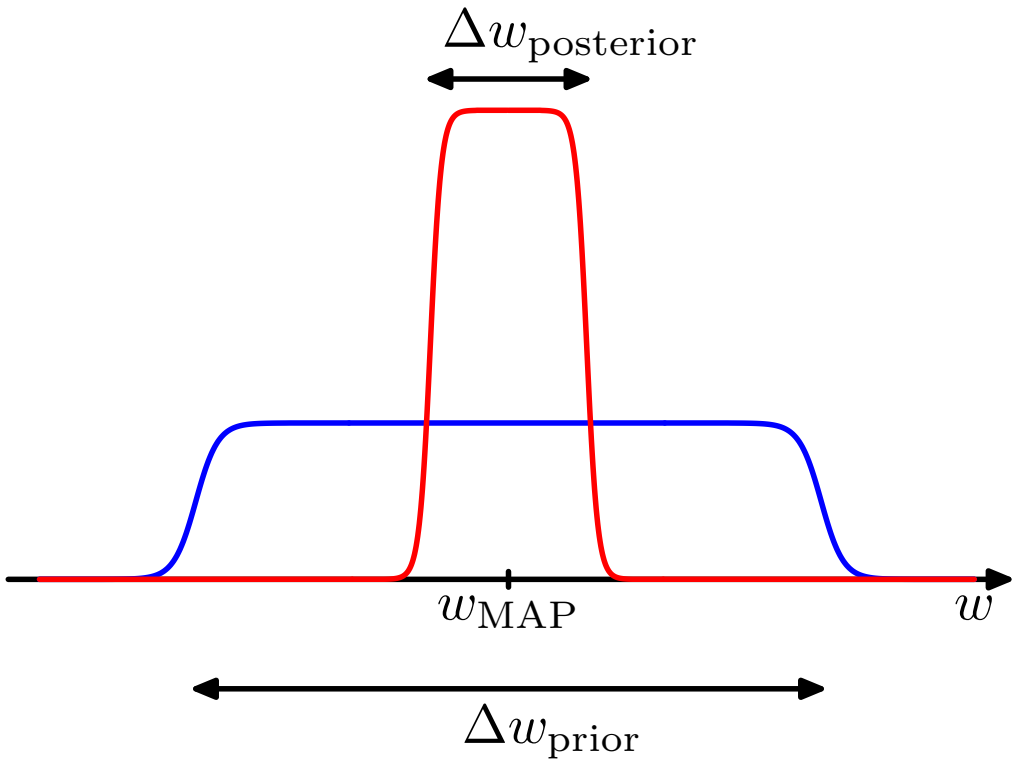


Figure: Chapter 3, Figure 12

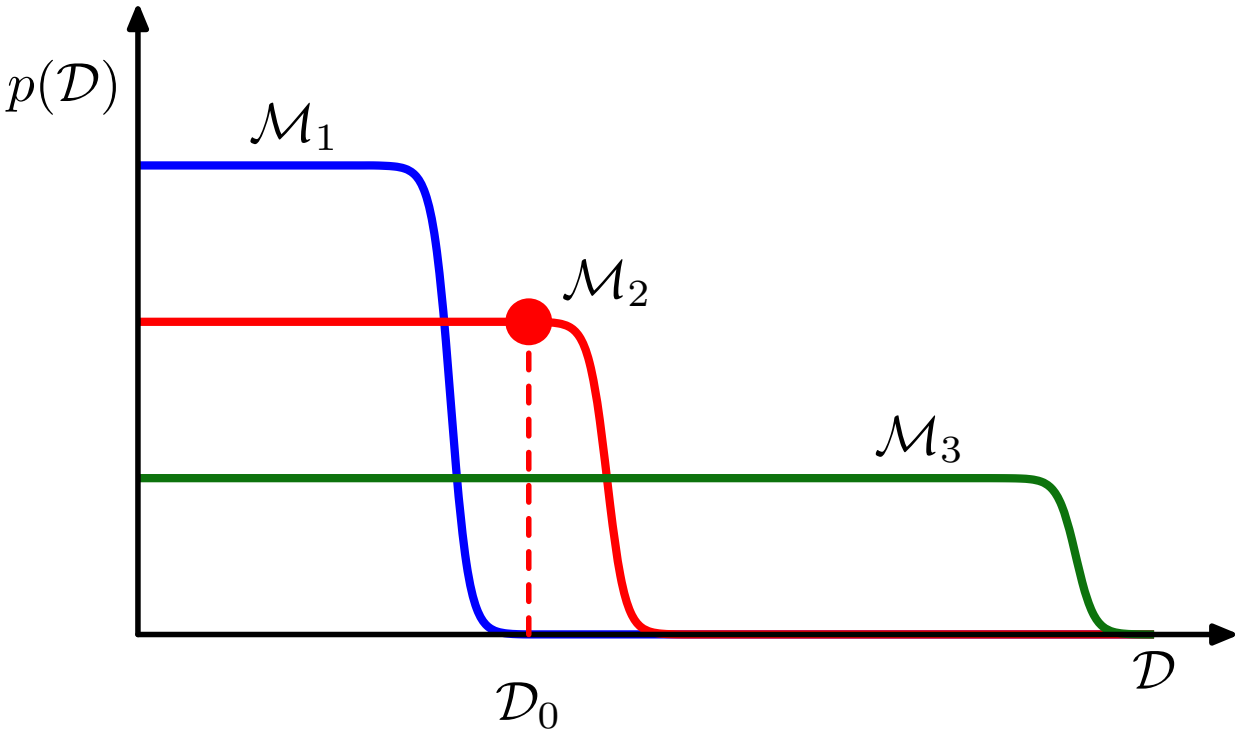


Figure: Chapter 3, Figure 13

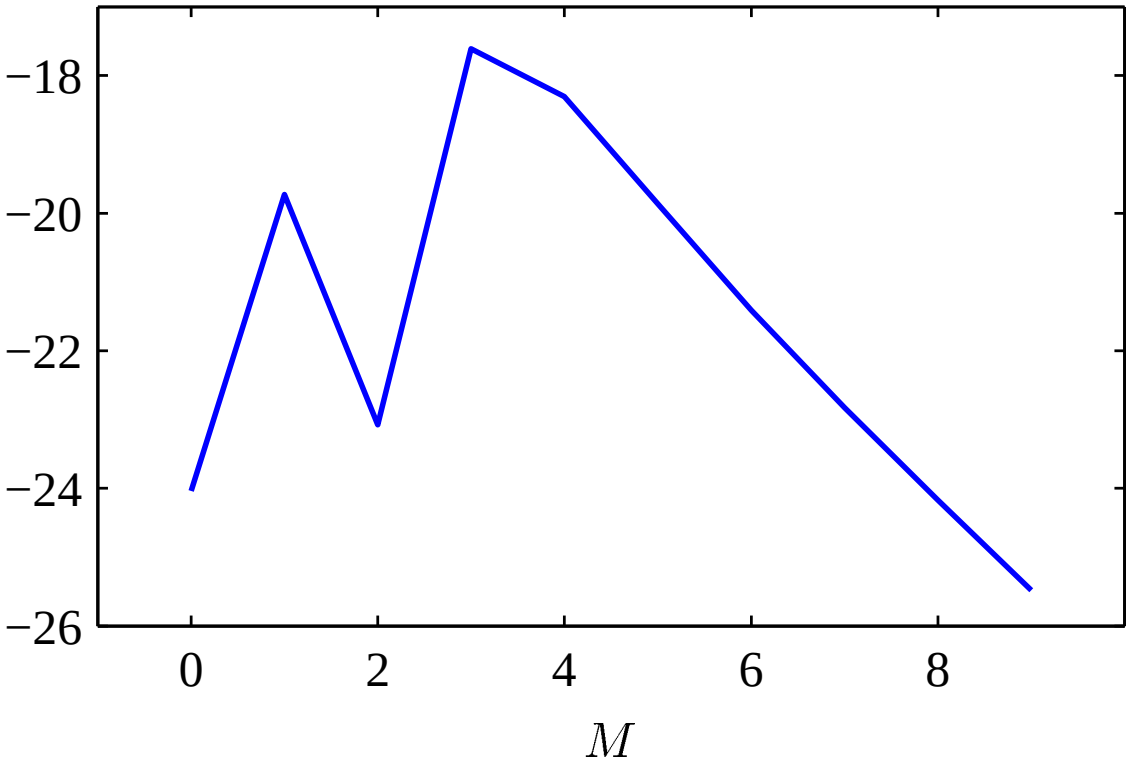


Figure: Chapter 3, Figure 14

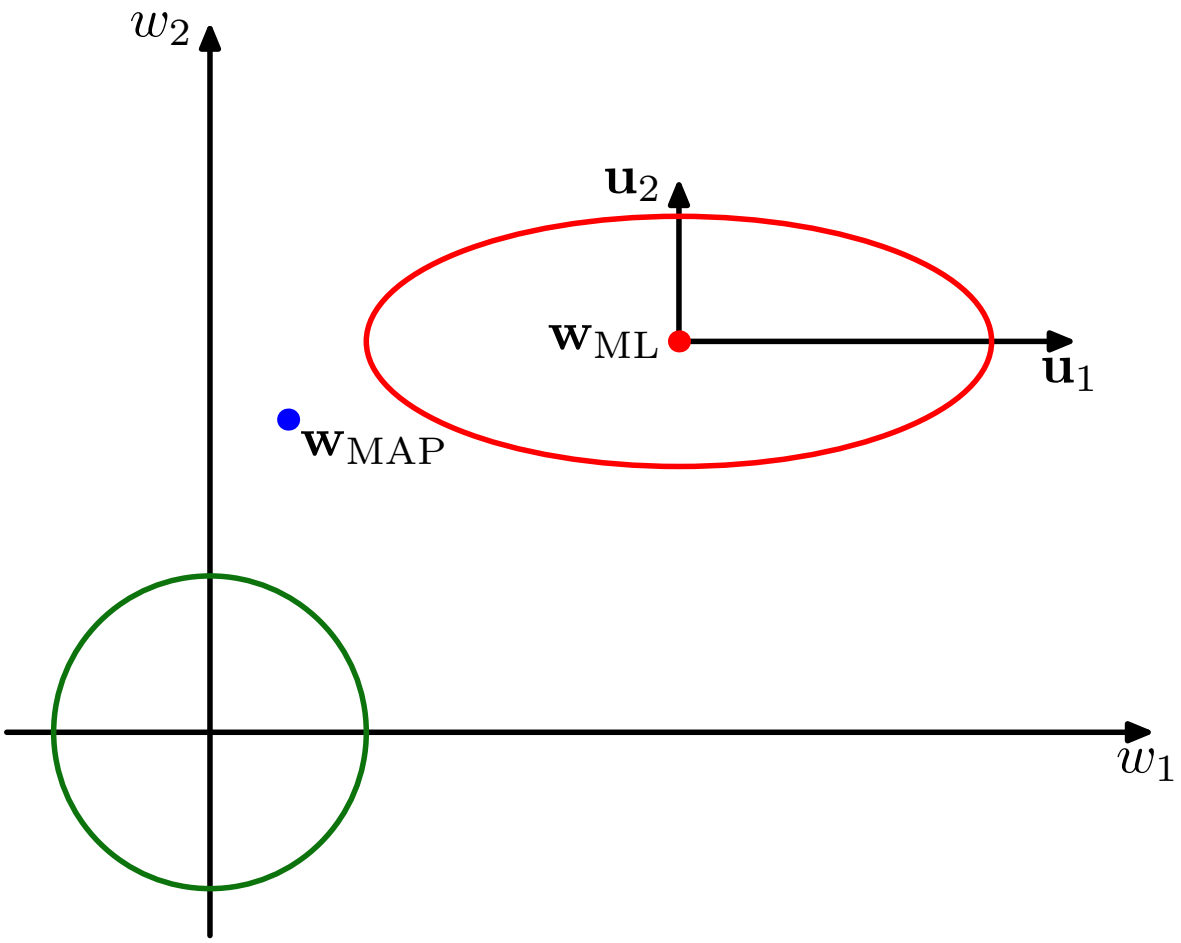


Figure: Chapter 3, Figure 15

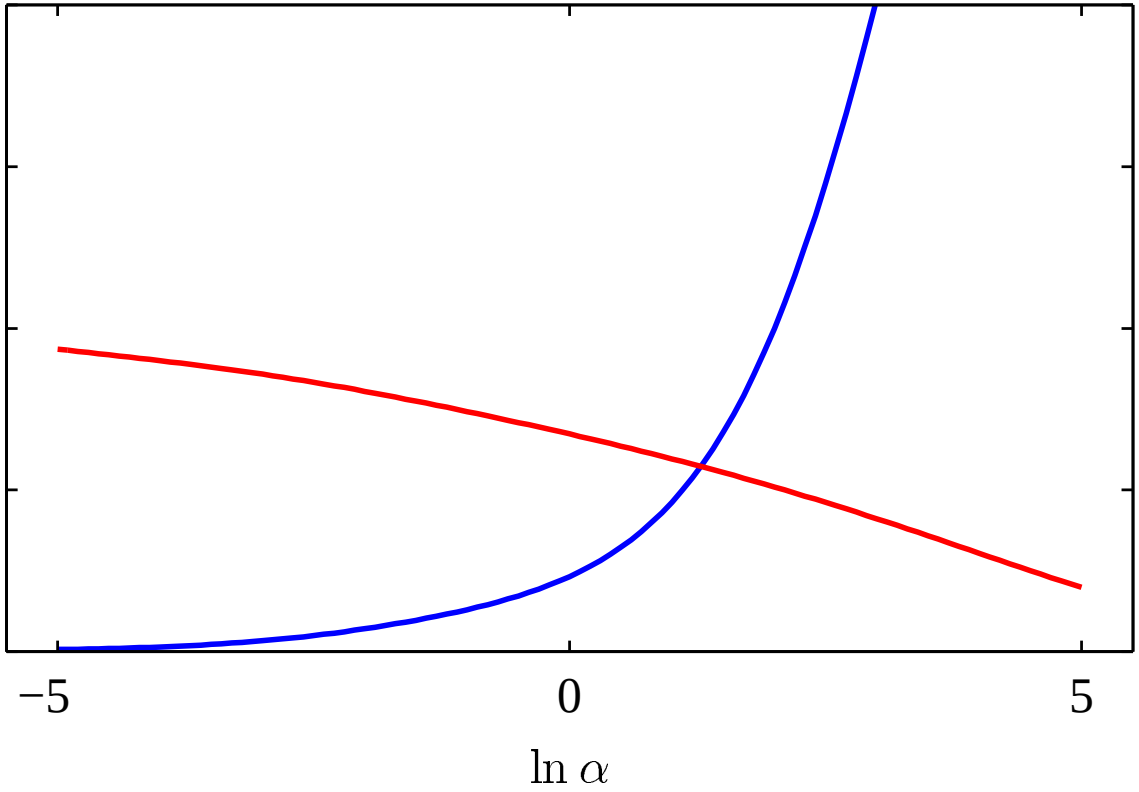


Figure: Chapter 3, Figure 16a

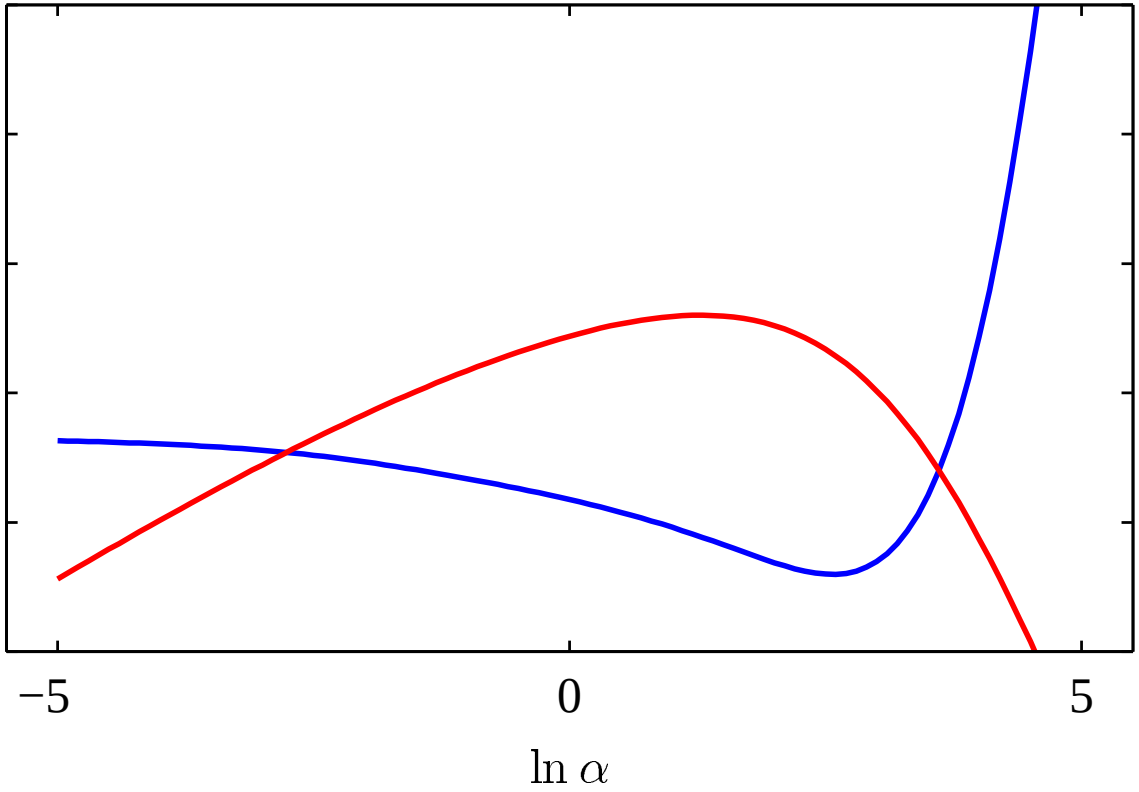


Figure: Chapter 3, Figure 16b

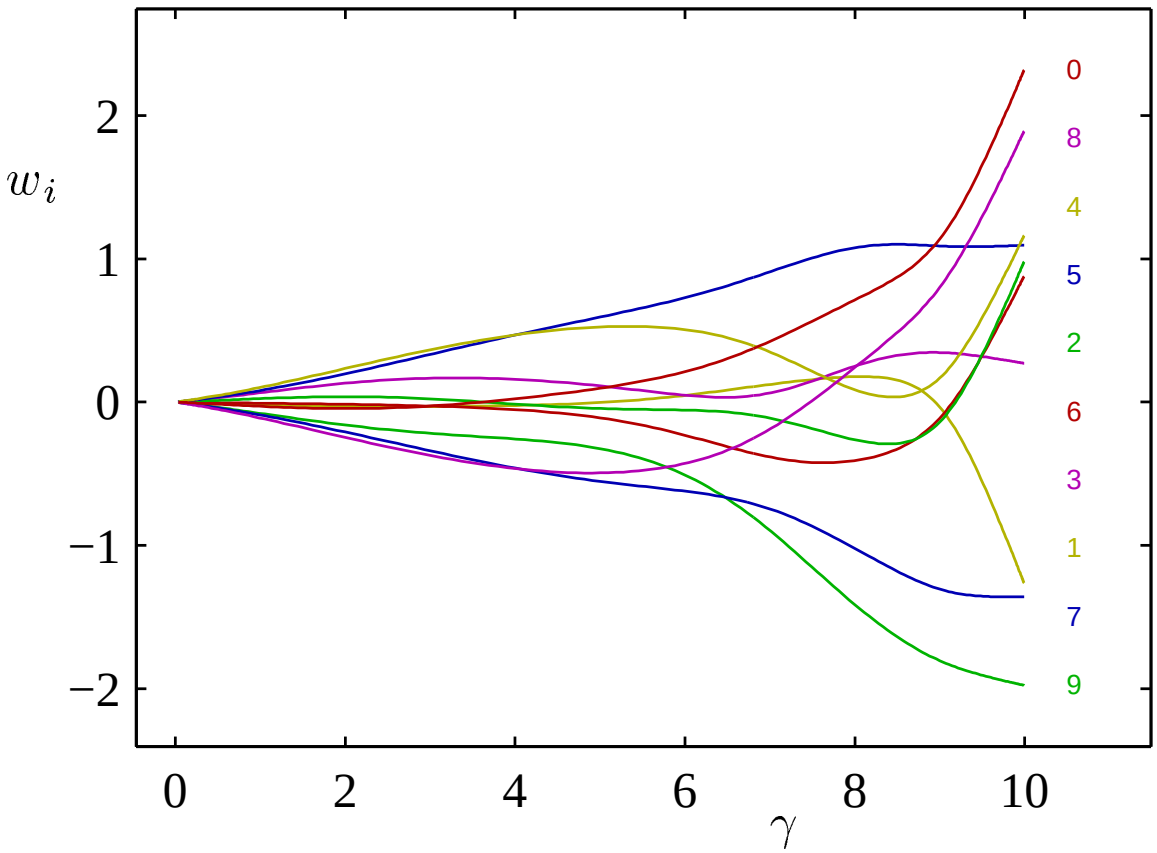
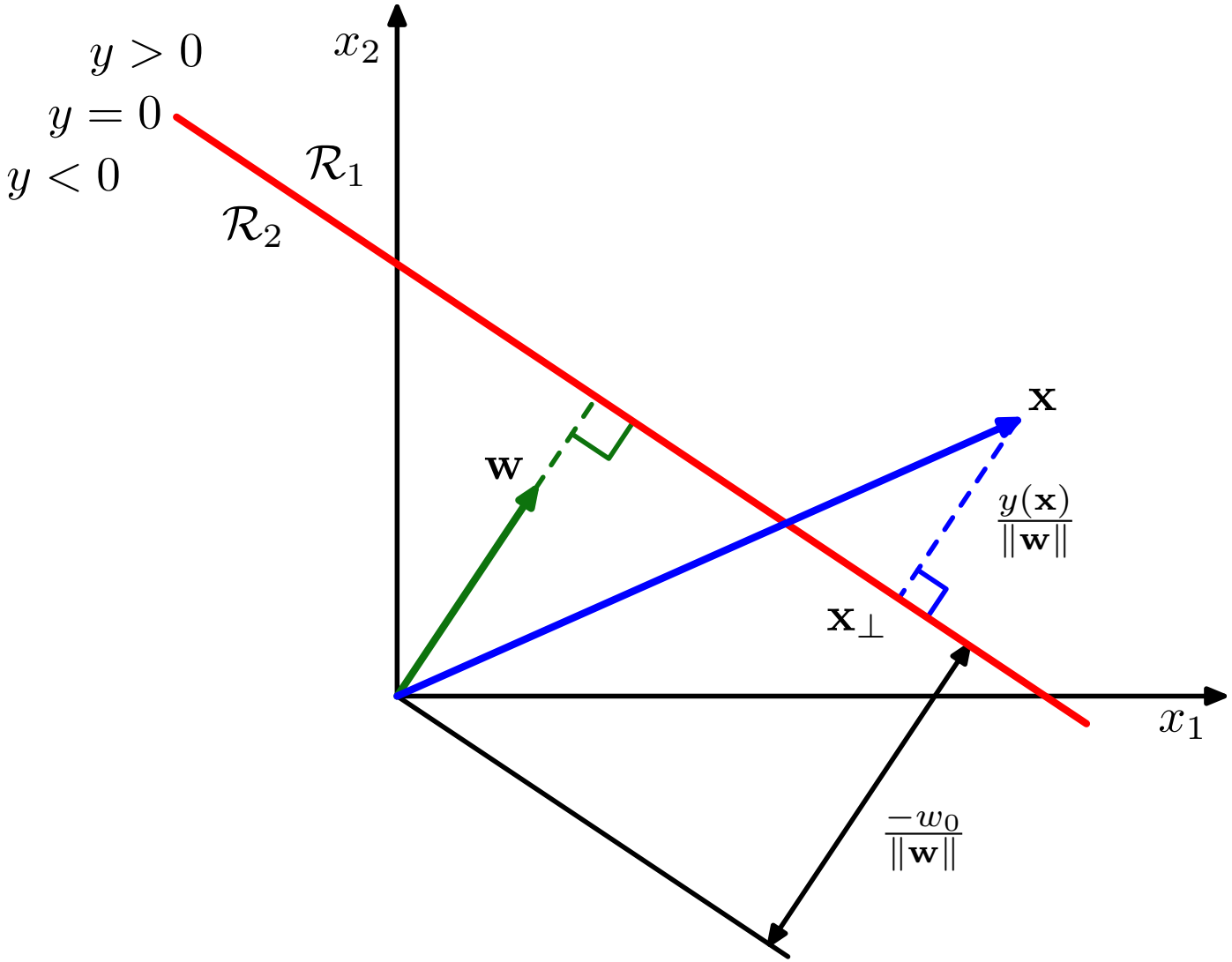


Figure: Chapter 3, Figure 17



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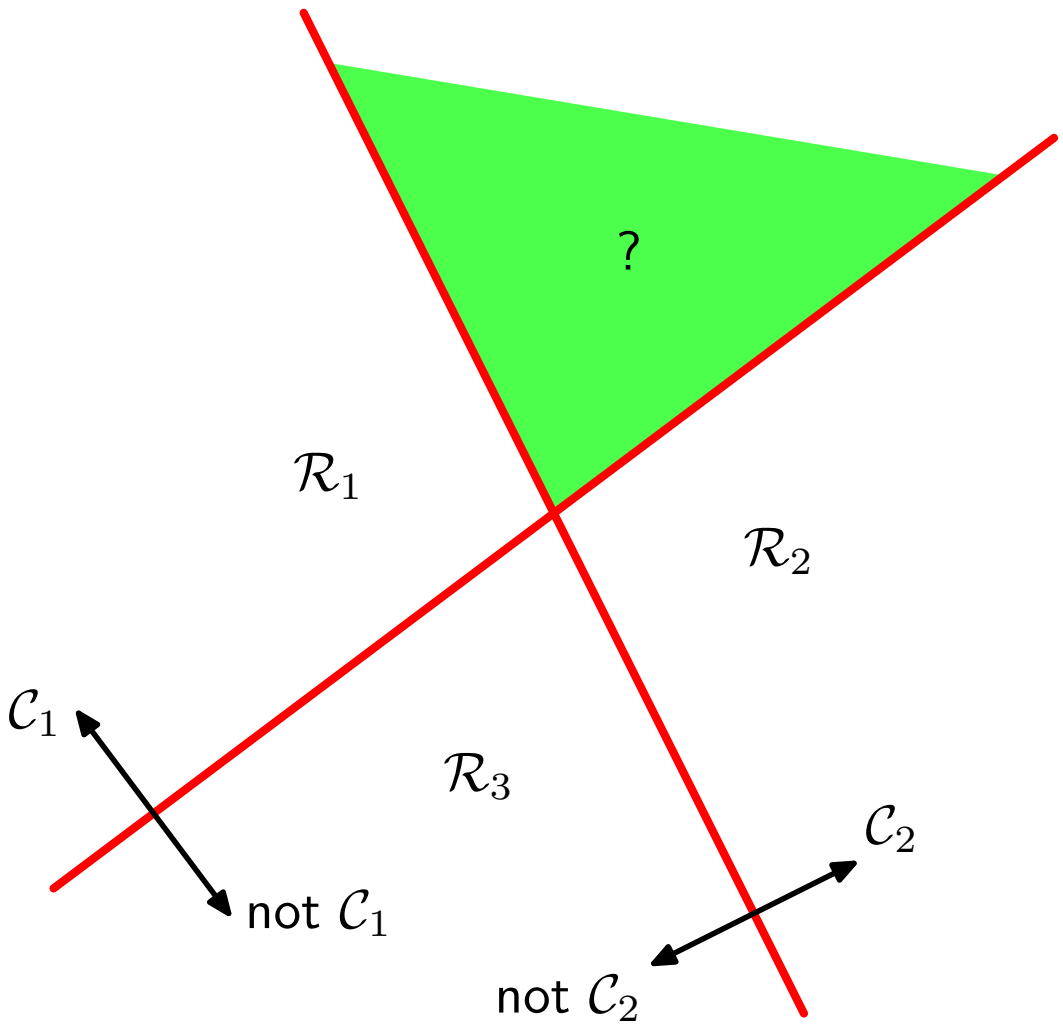


Figure: Chapter 4, Figure 2a

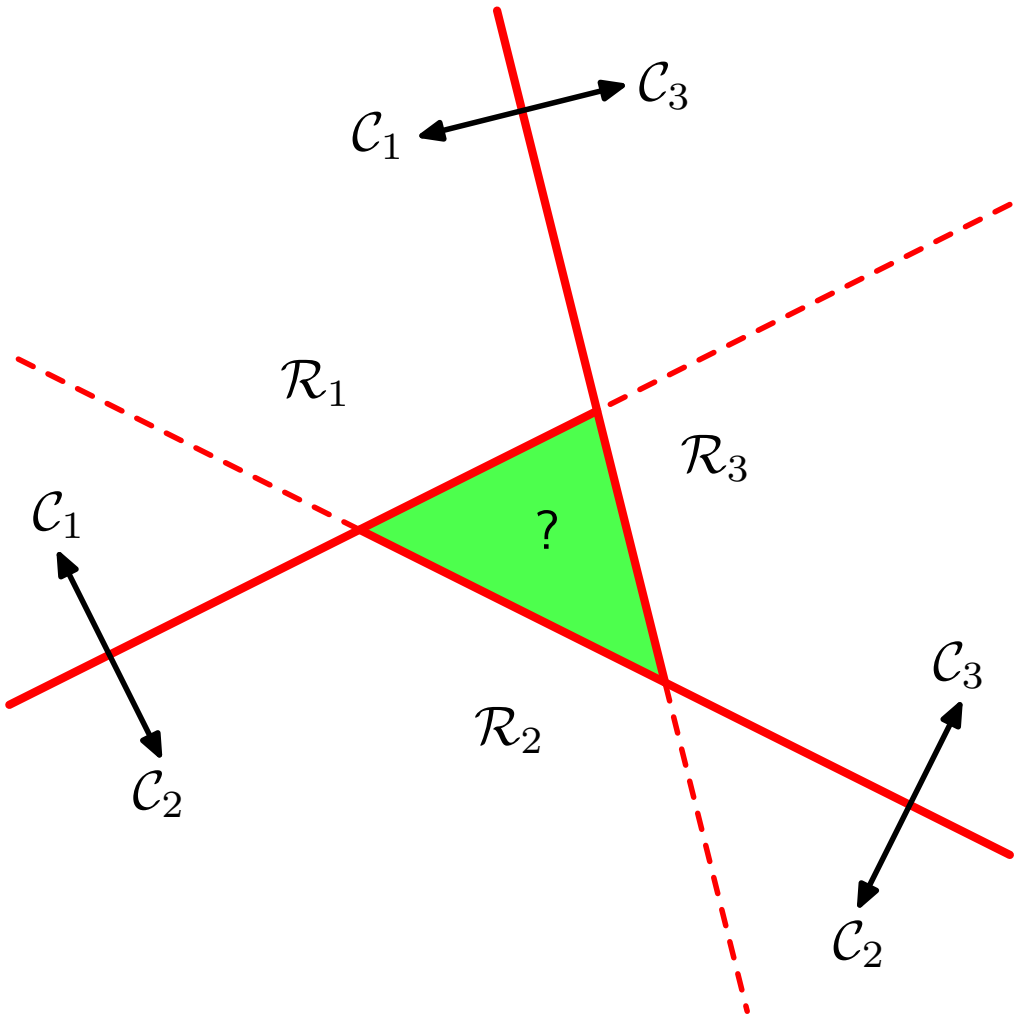


Figure: Chapter 4, Figure 2b

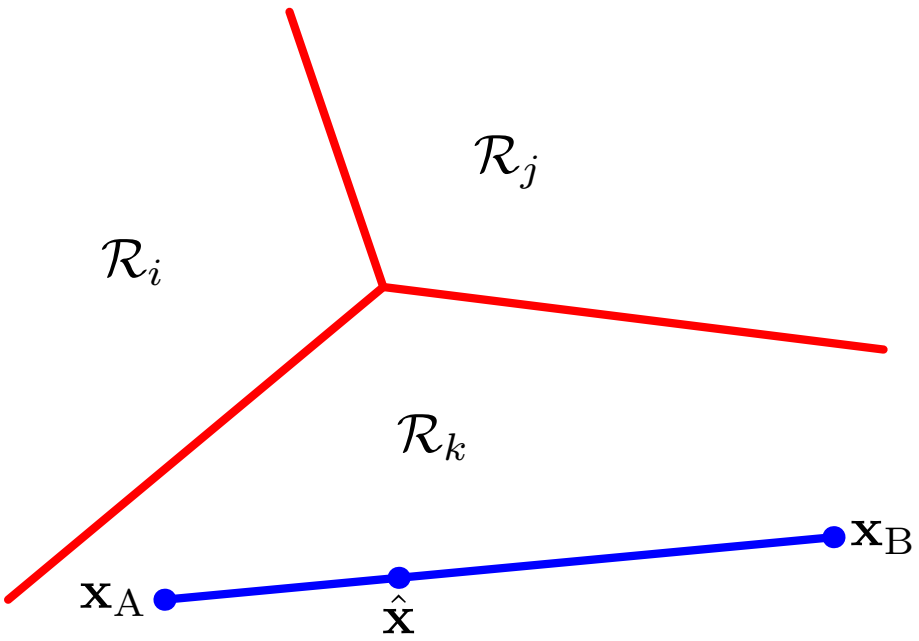


Figure: Chapter 4, Figure 3

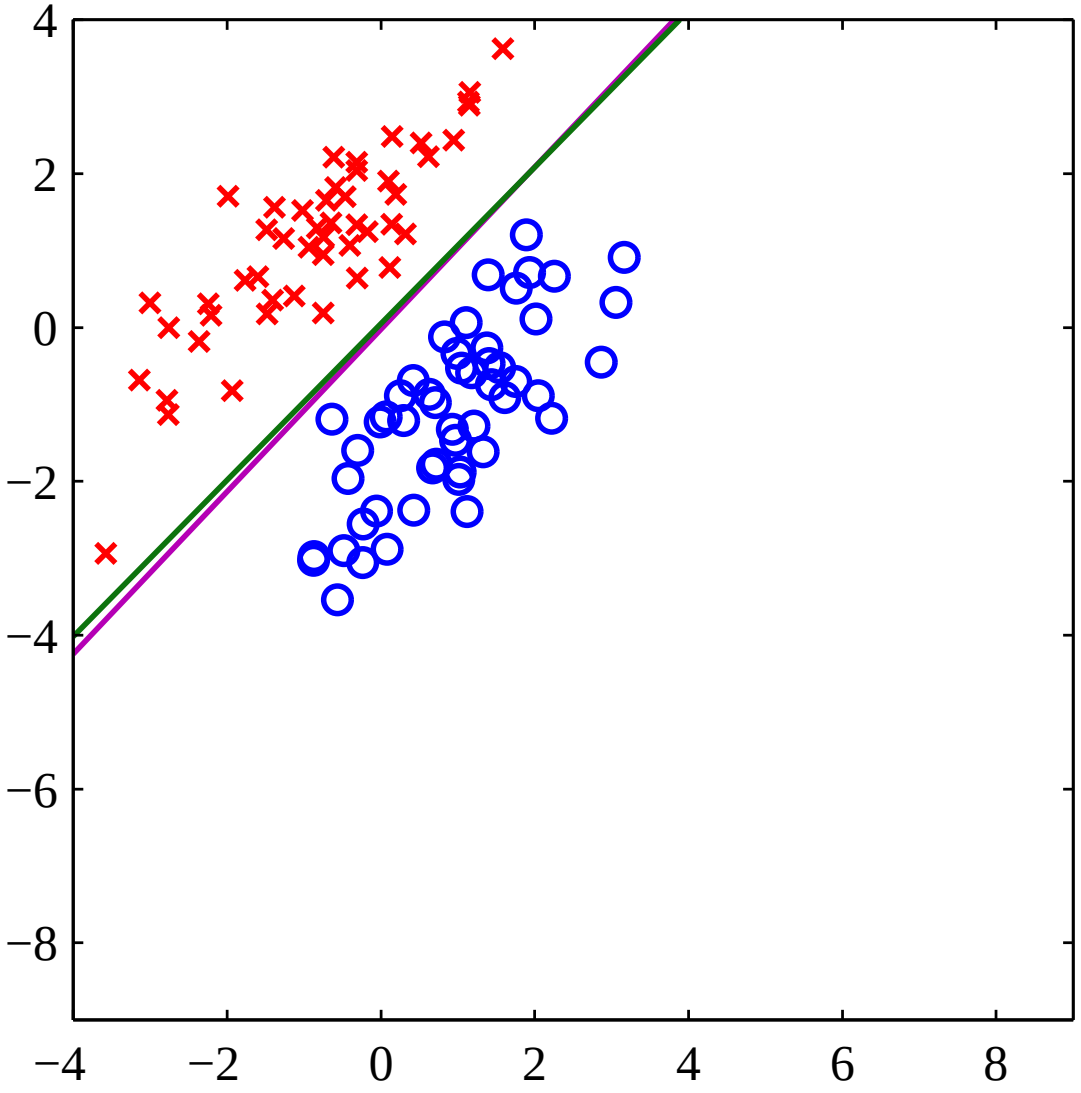


Figure: Chapter 4, Figure 4a

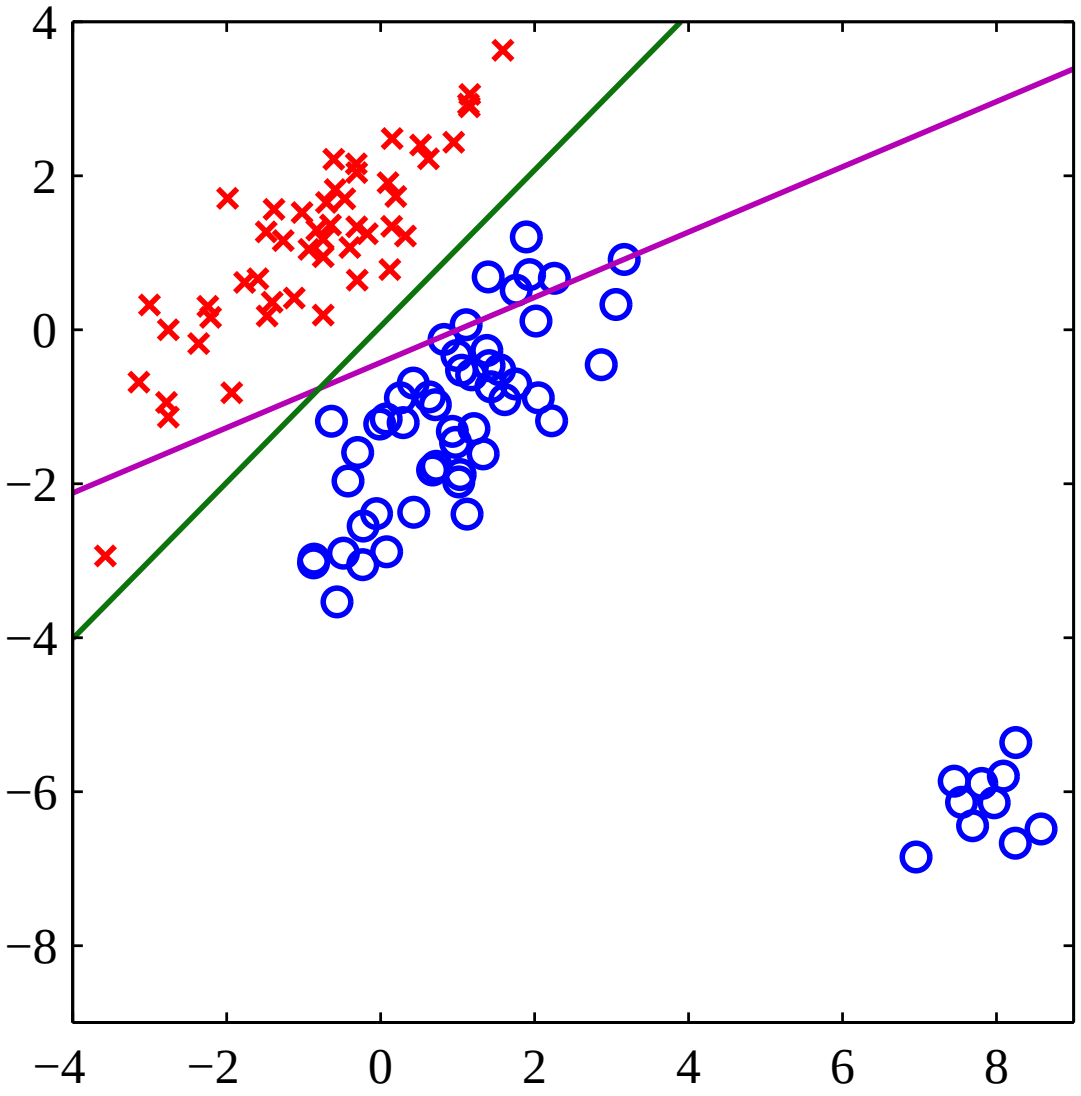


Figure: Chapter 4, Figure 4b

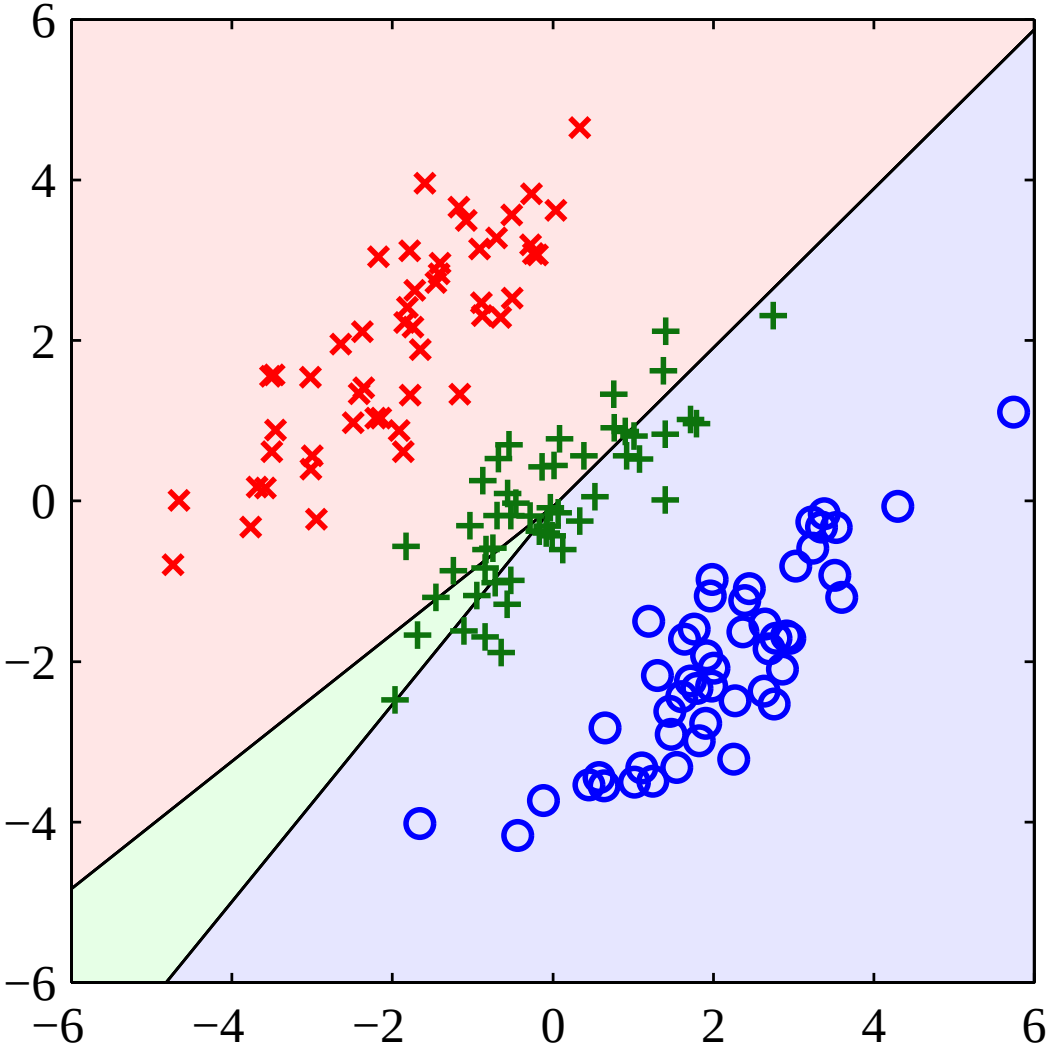


Figure: Chapter 4, Figure 5a

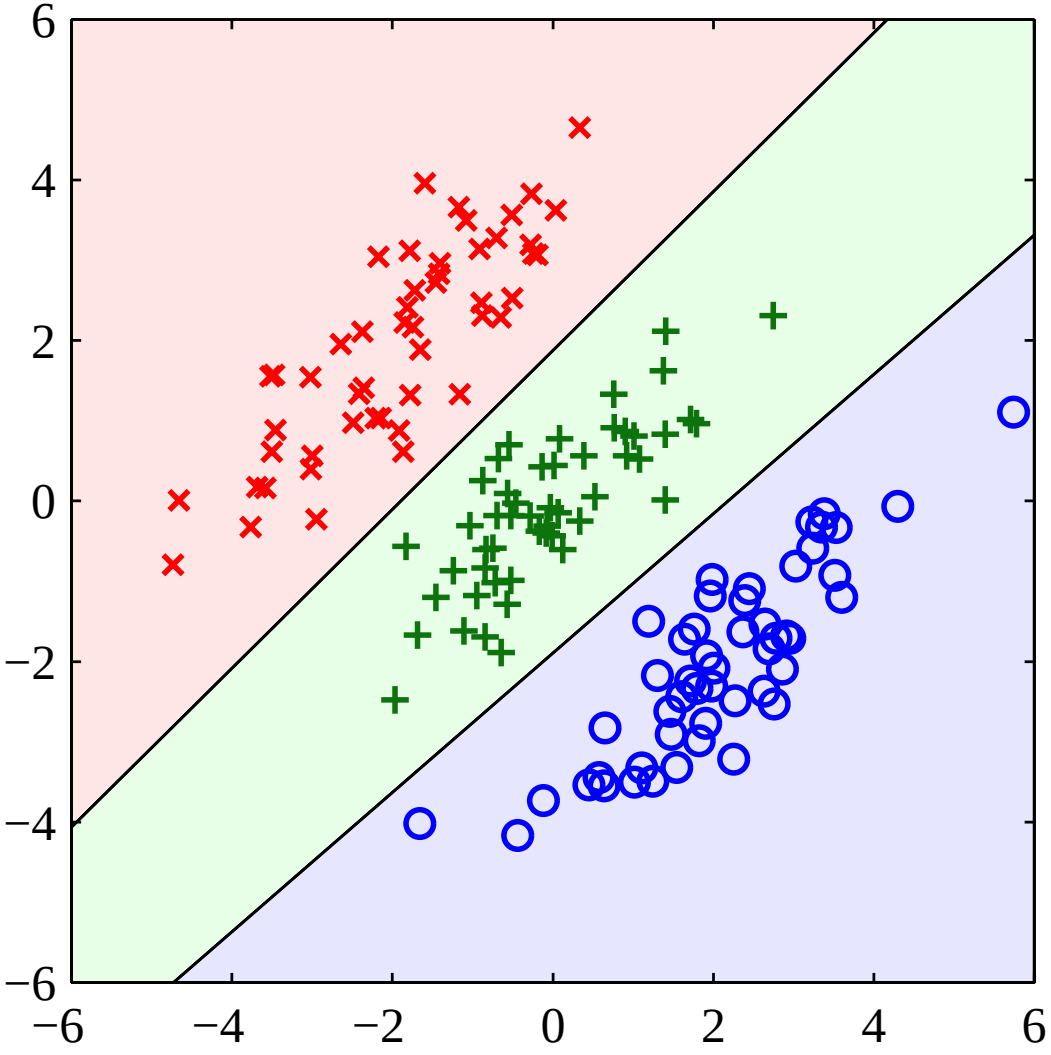


Figure: Chapter 4, Figure 5b

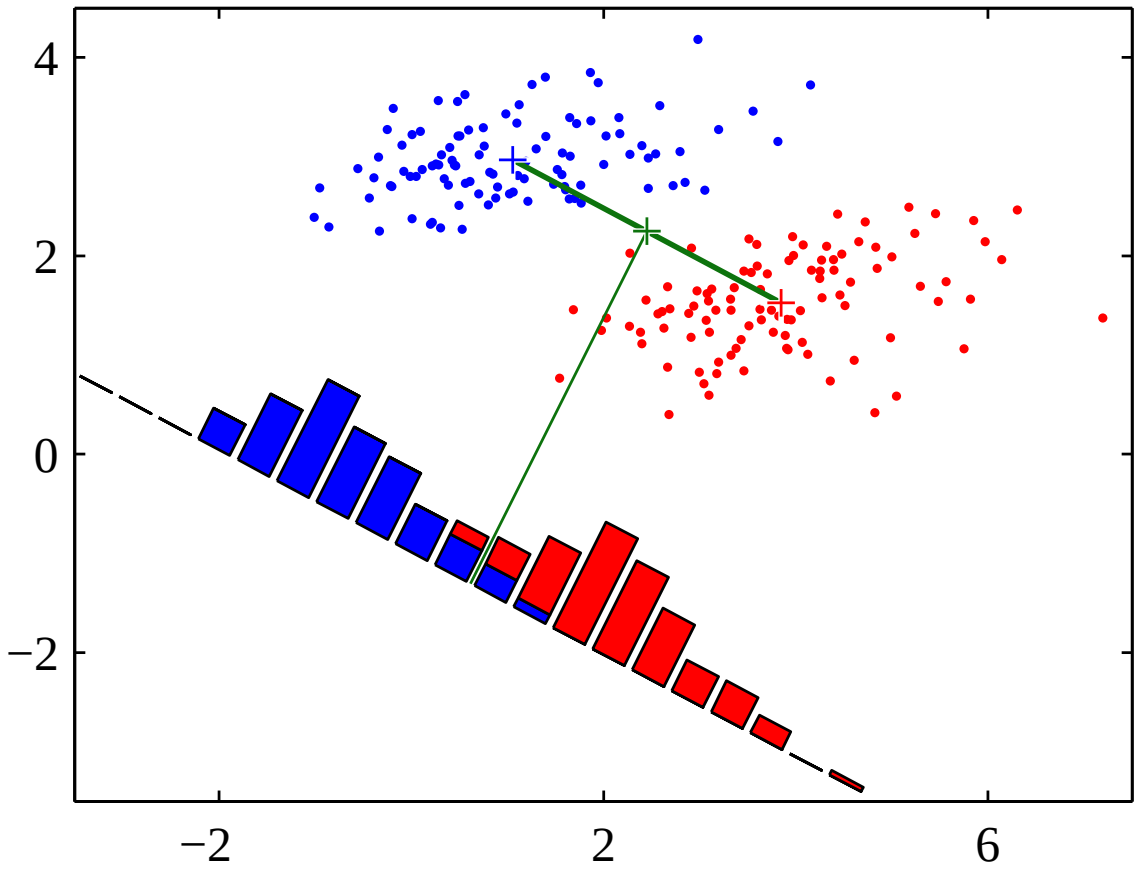
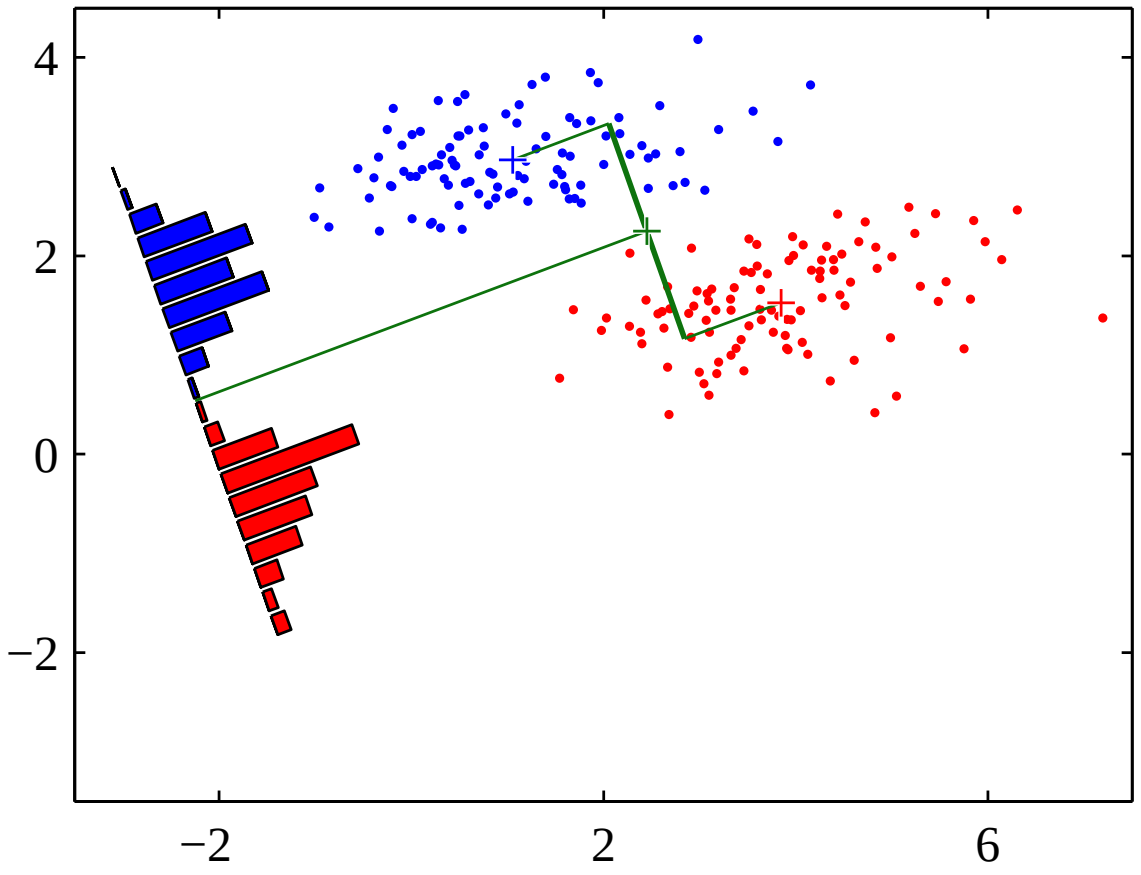


Figure: Chapter 4, Figure 6a



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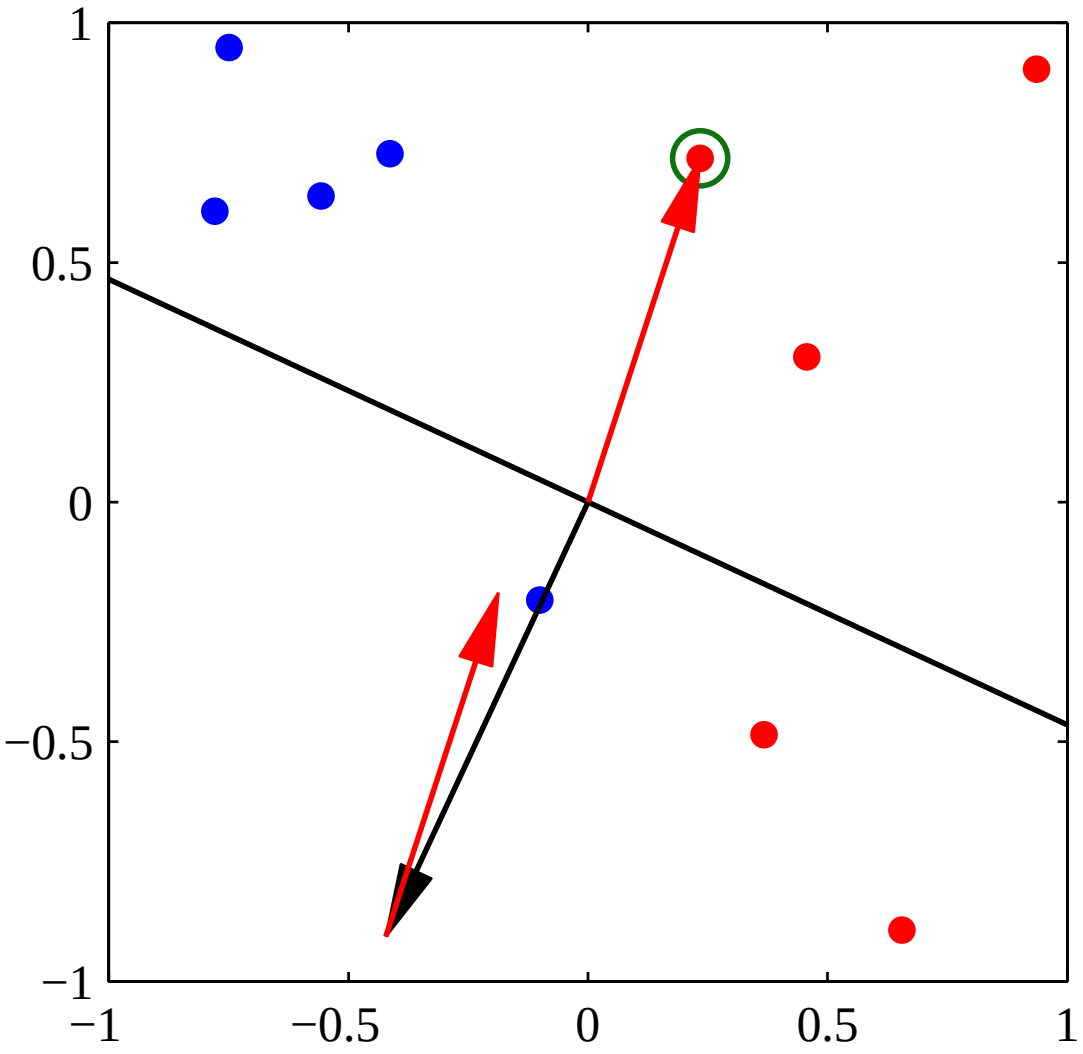


Figure: Chapter 4, Figure 7a

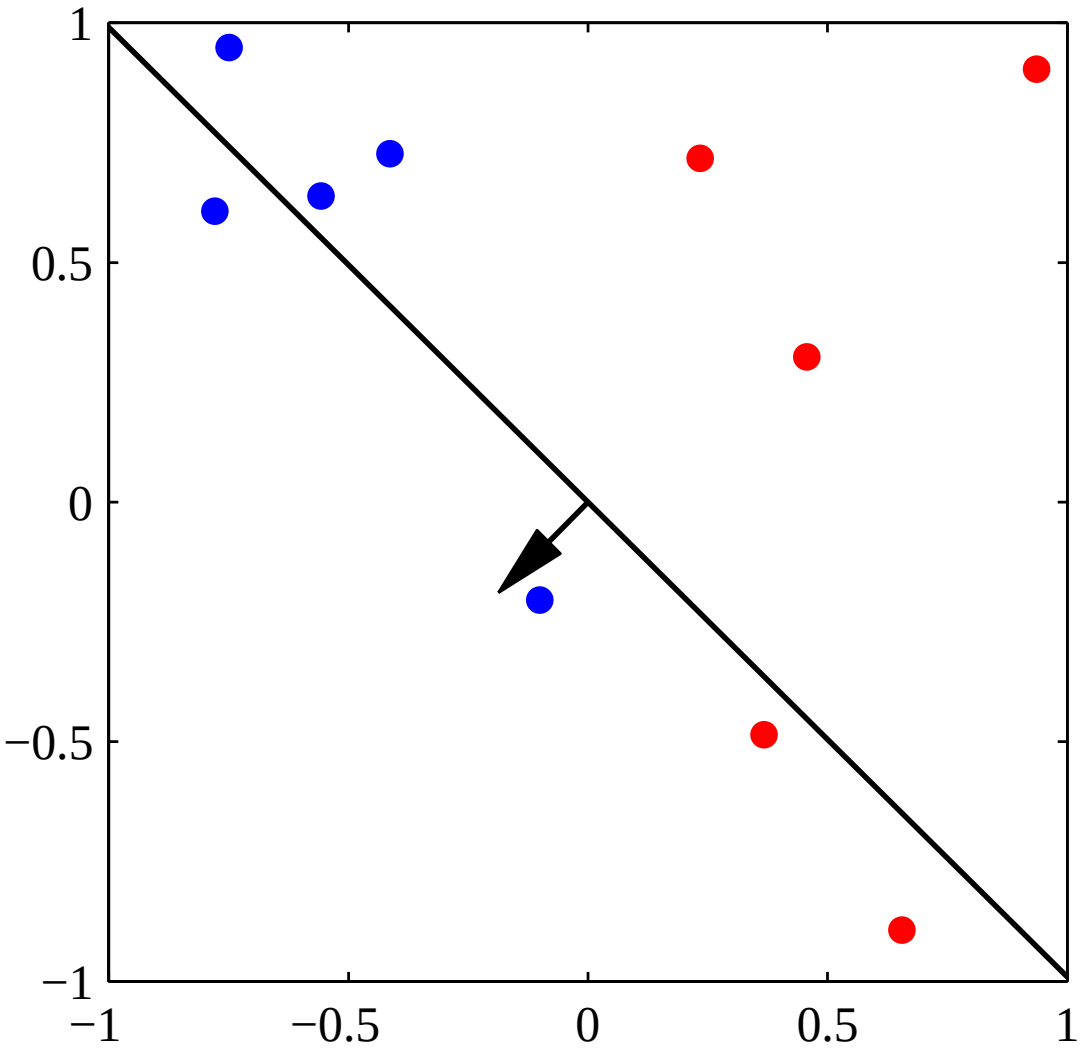


Figure: Chapter 4, Figure 7b

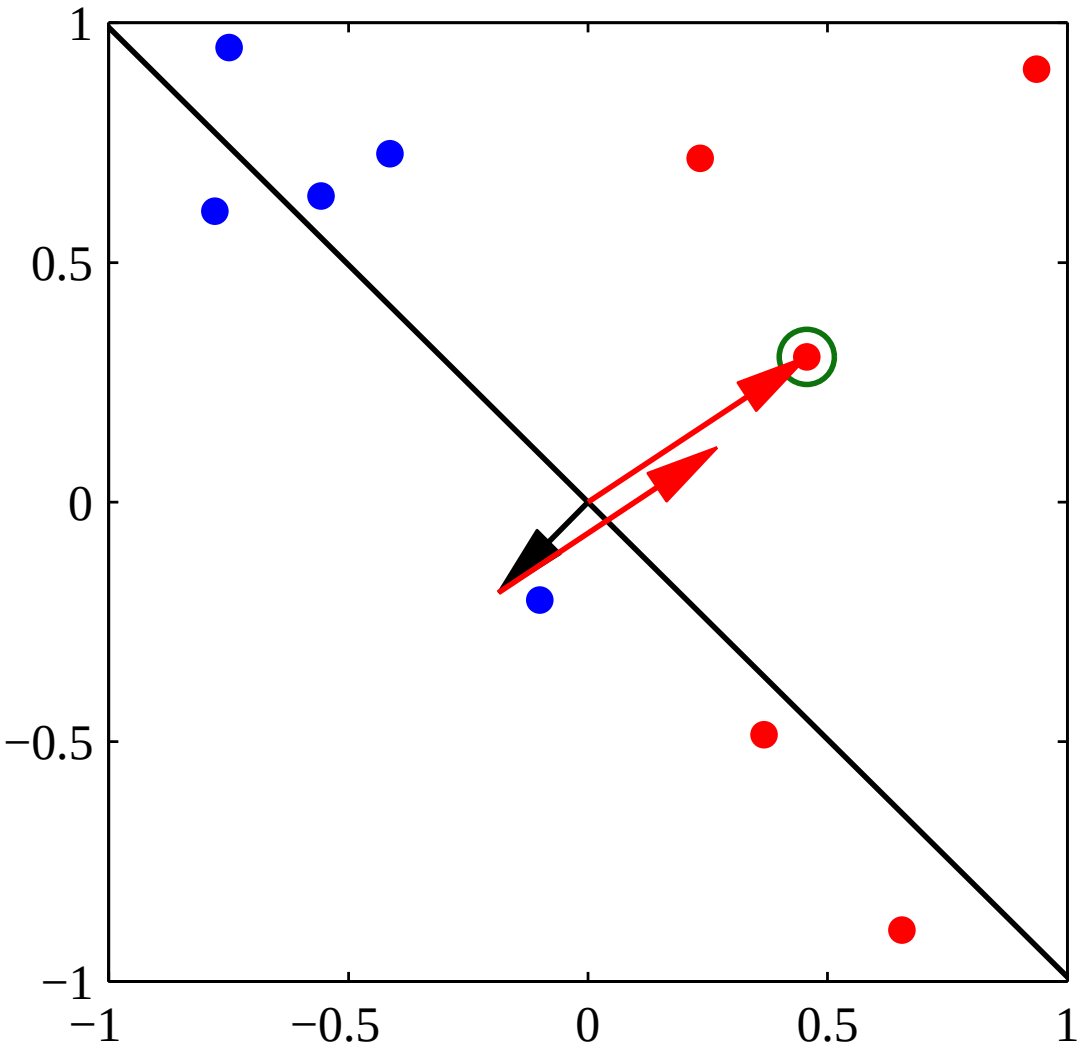
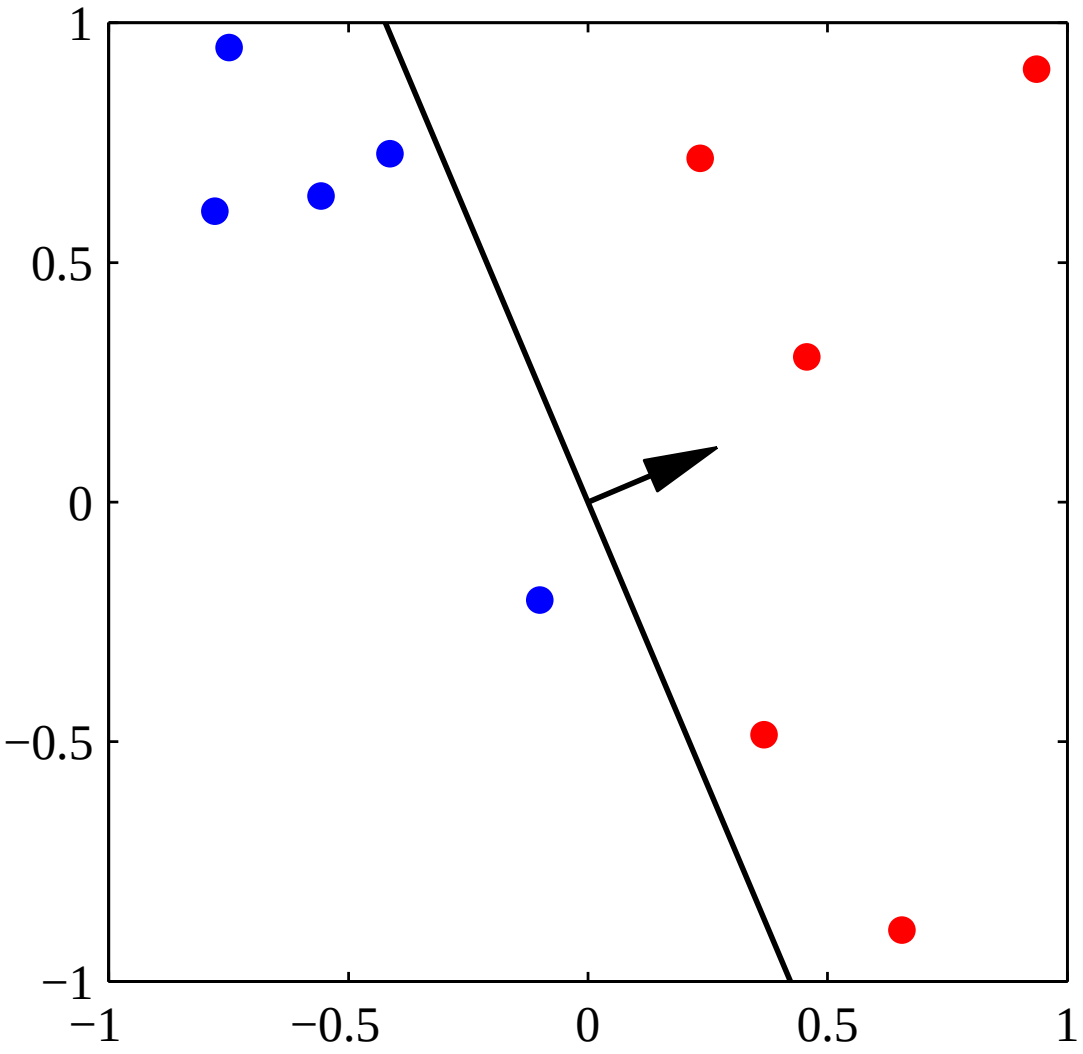


Figure: Chapter 4, Figure 7c



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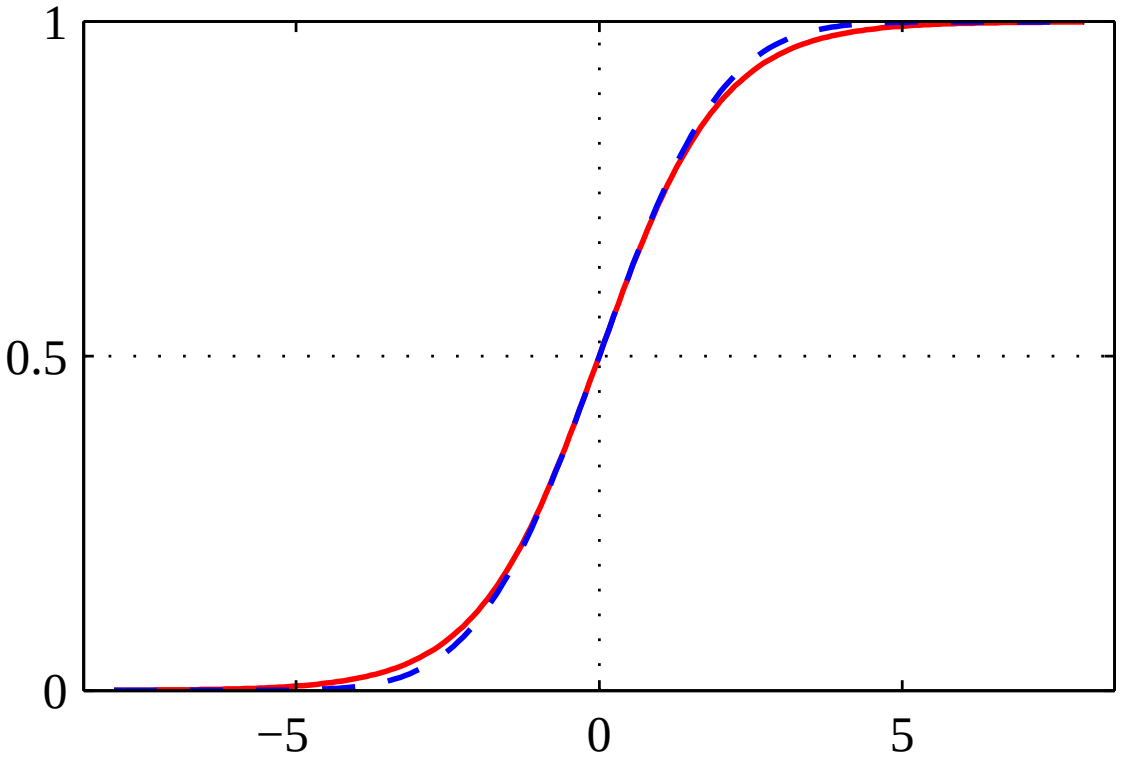

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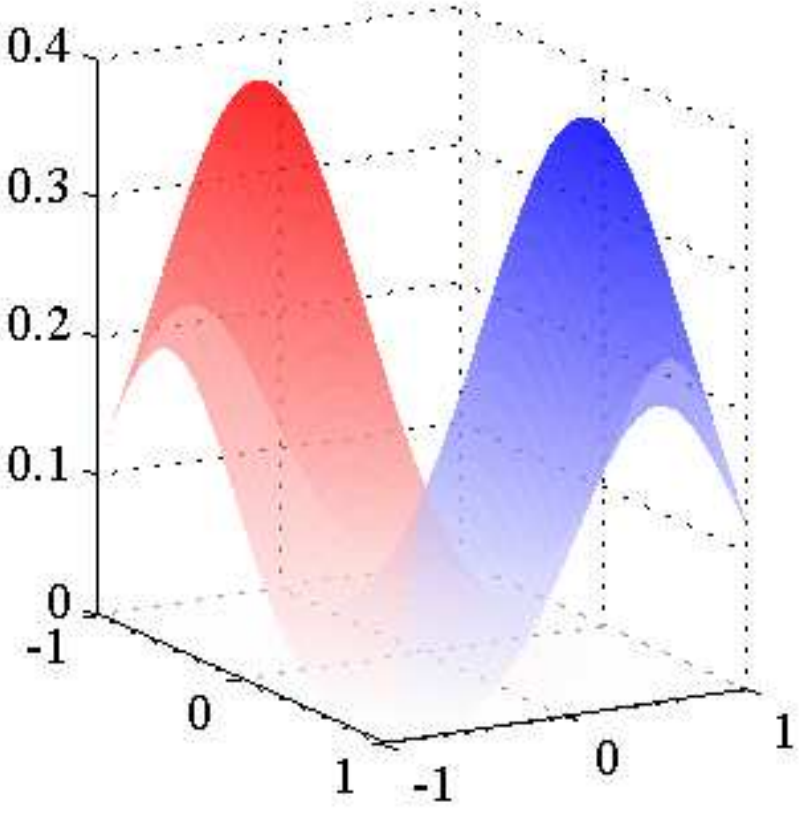

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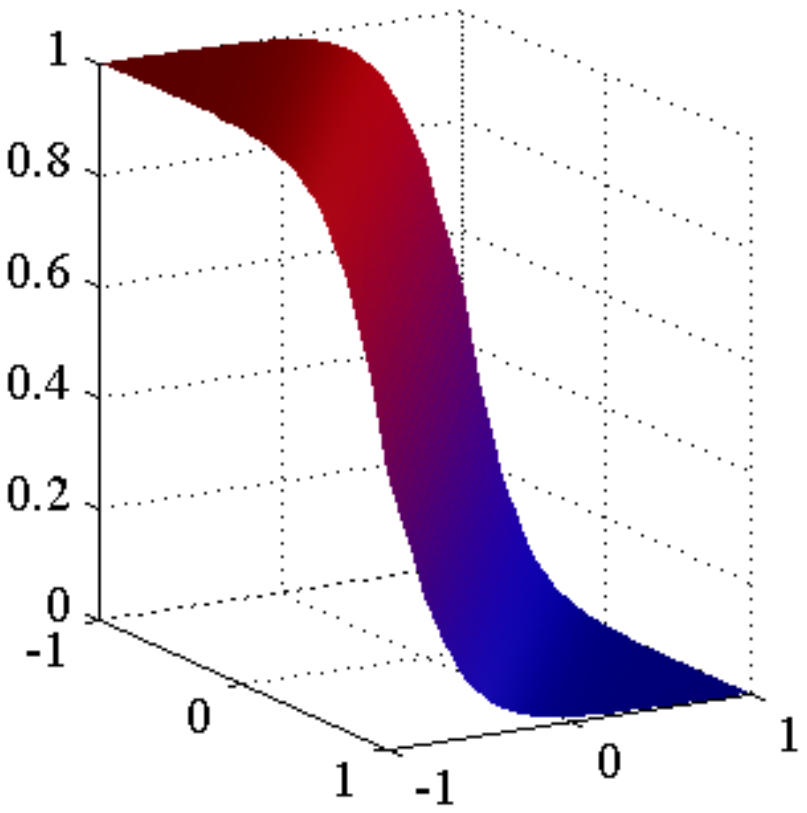

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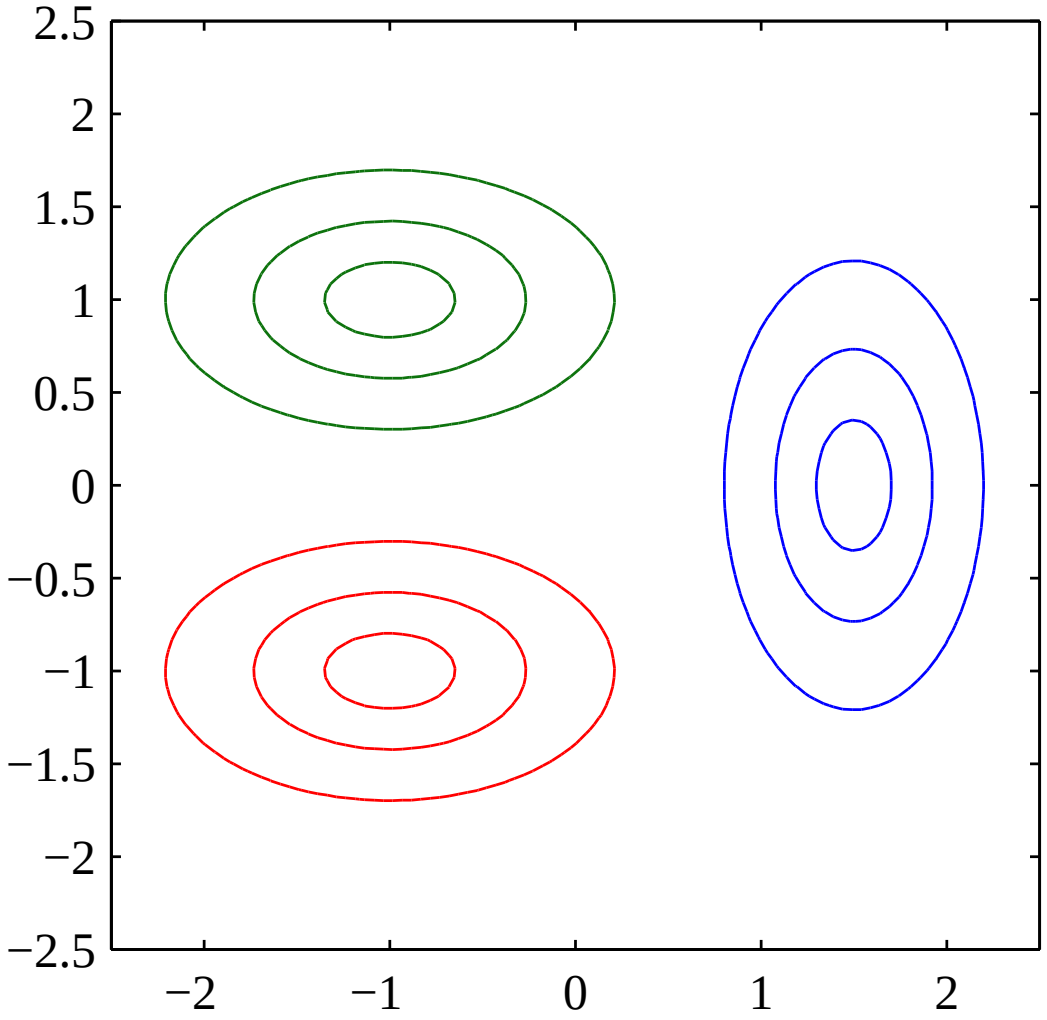


Figure: Chapter 4, Figure 11a

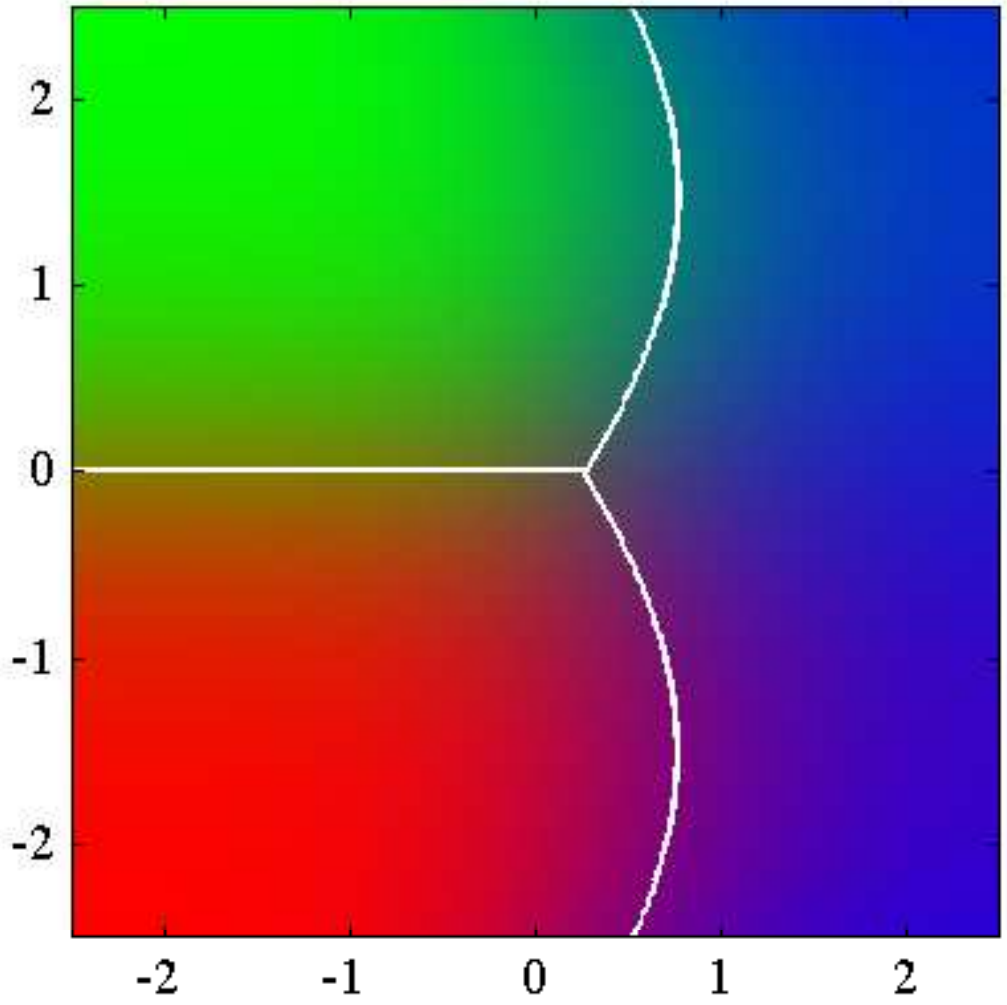


Figure: Chapter 4, Figure 11b

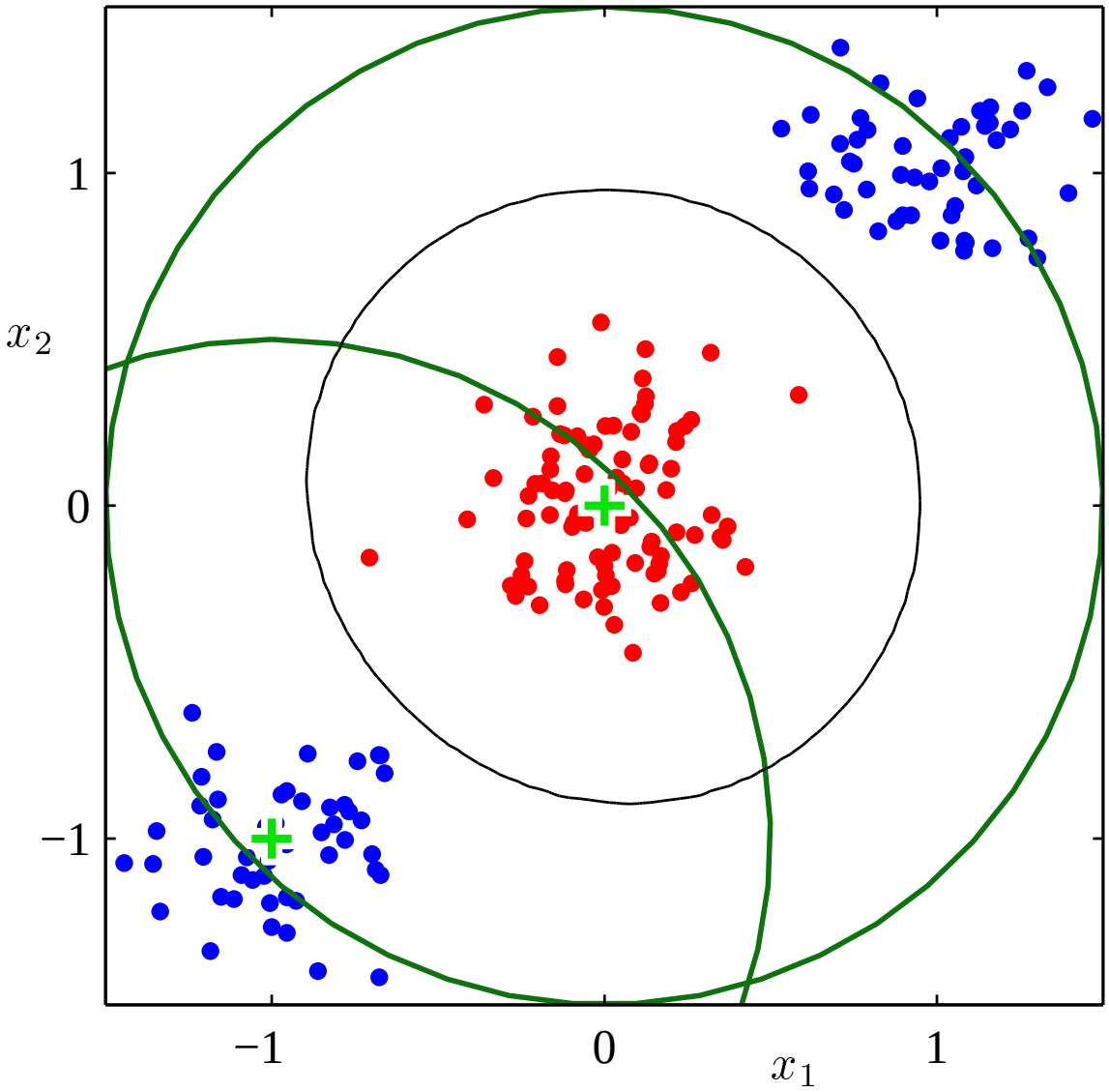
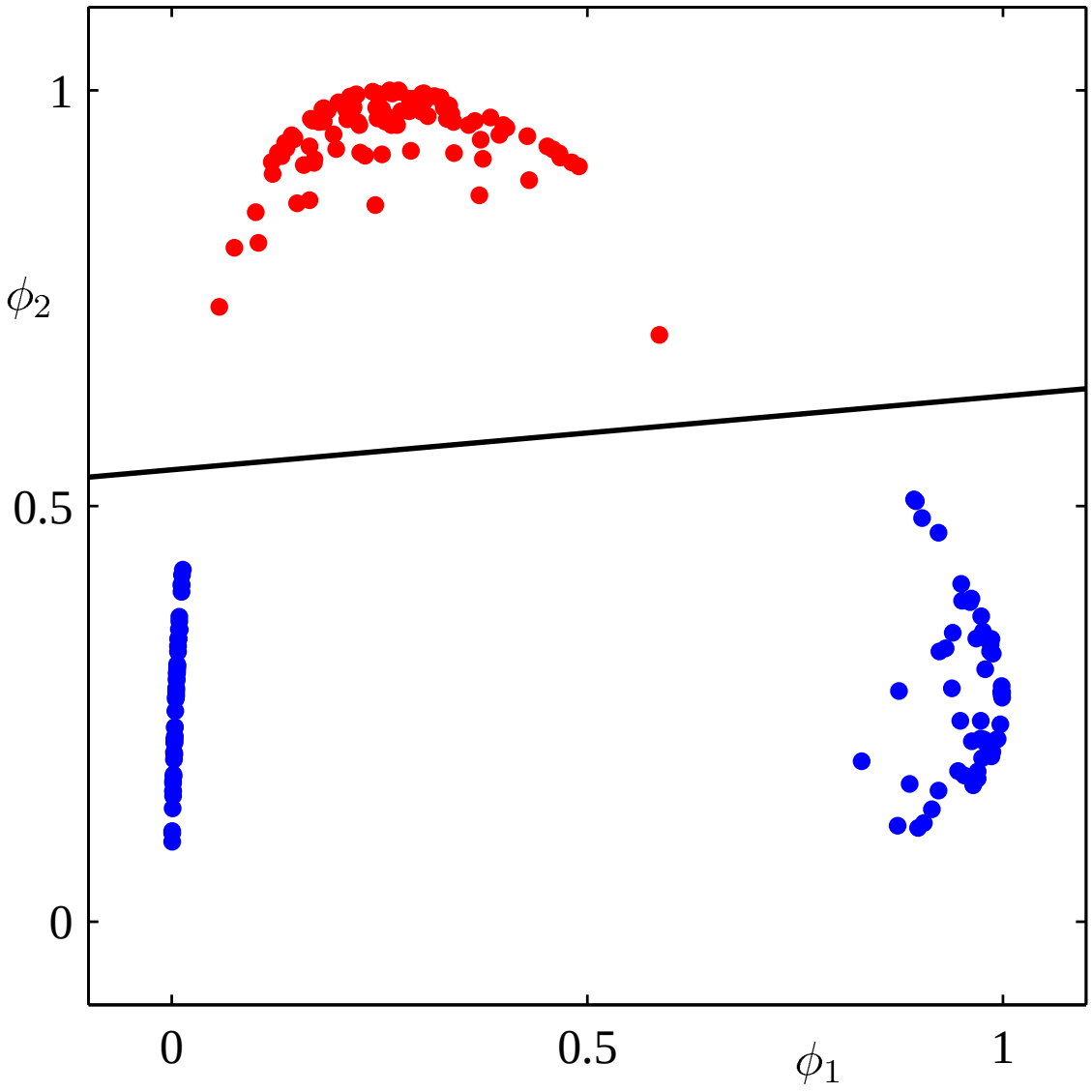


Figure: Chapter 4, Figure 12a



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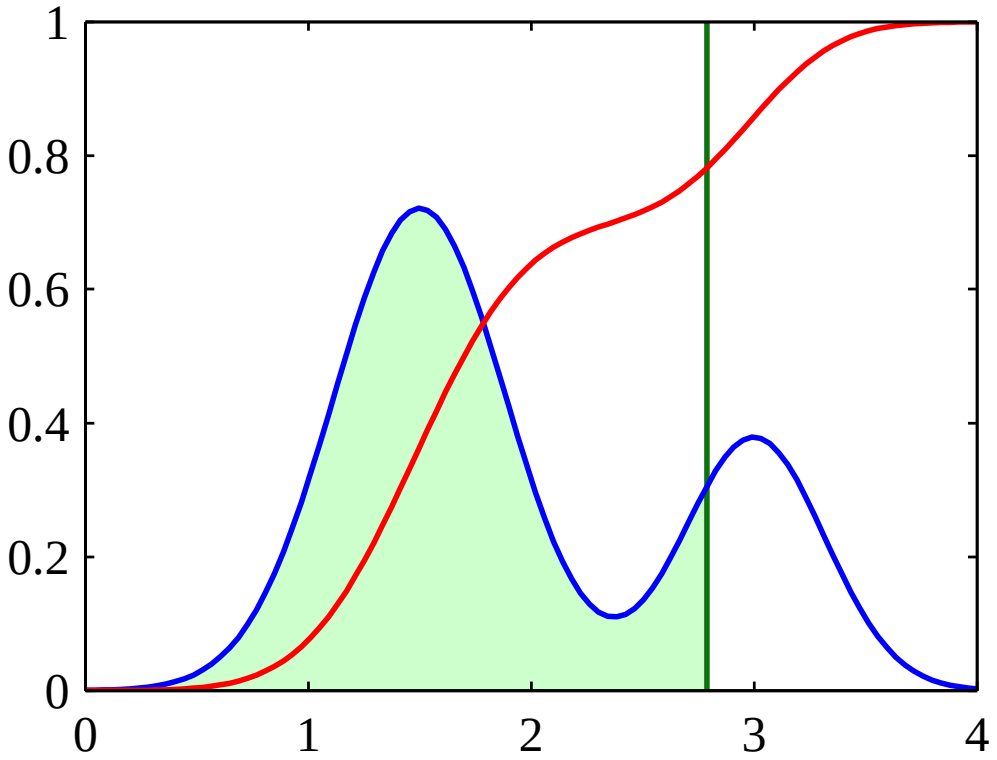
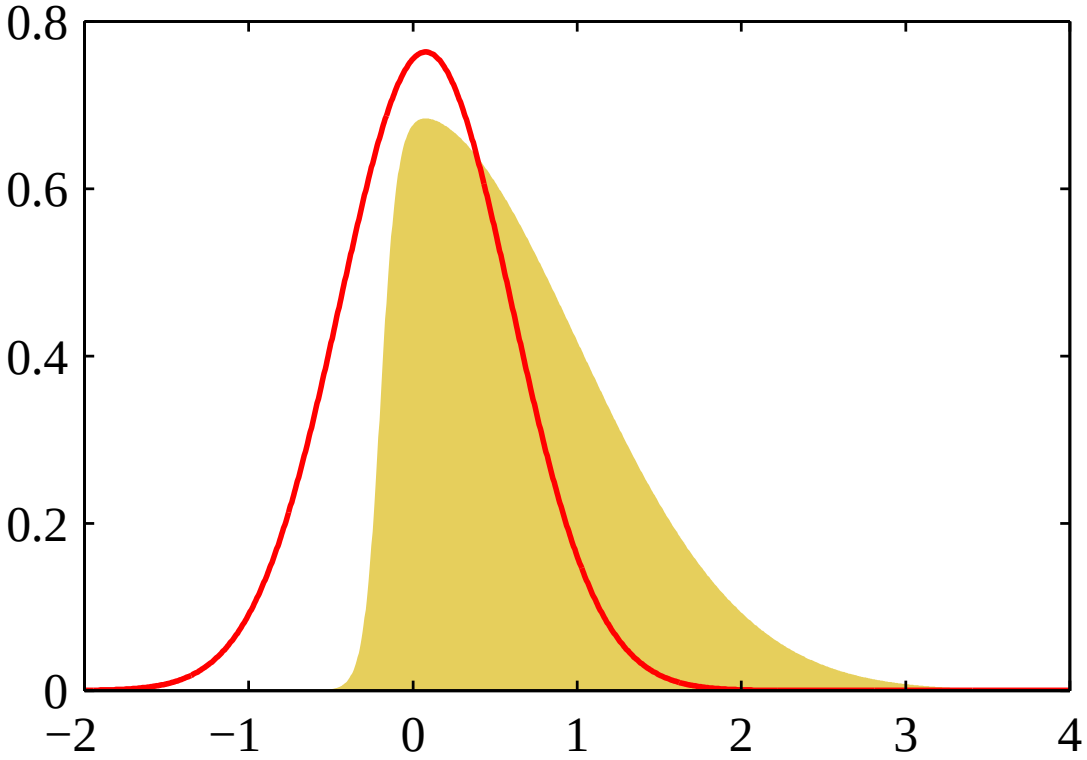


Figure: Chapter 4, Figure 13



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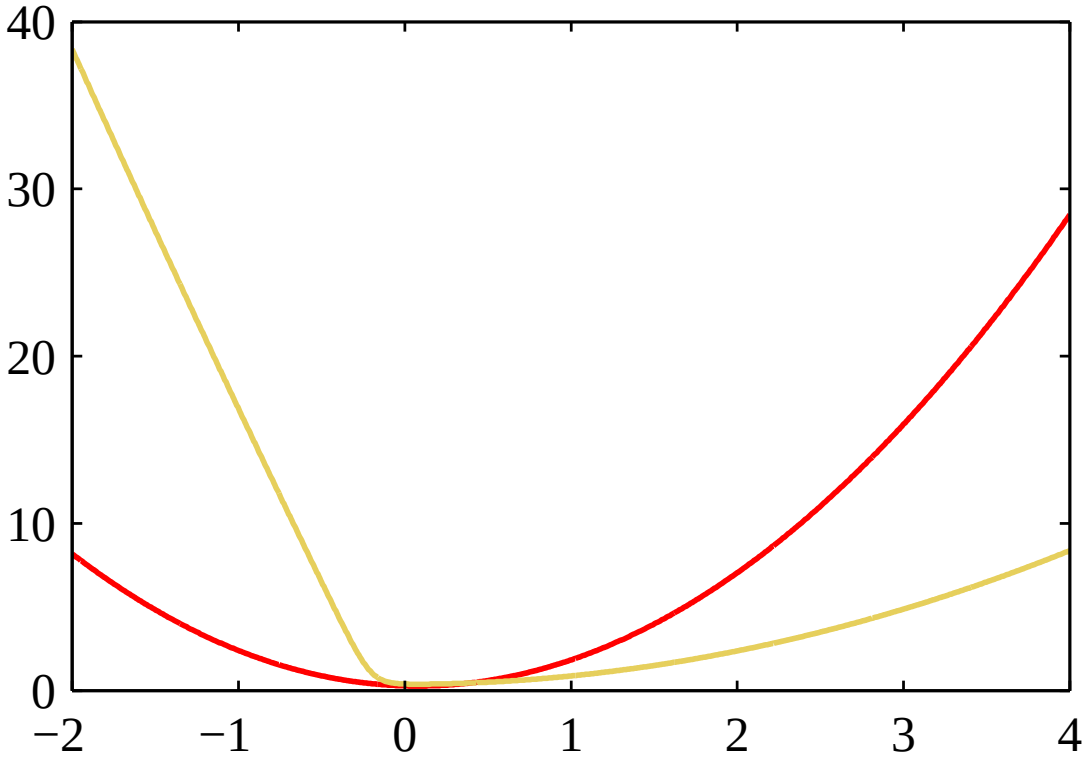

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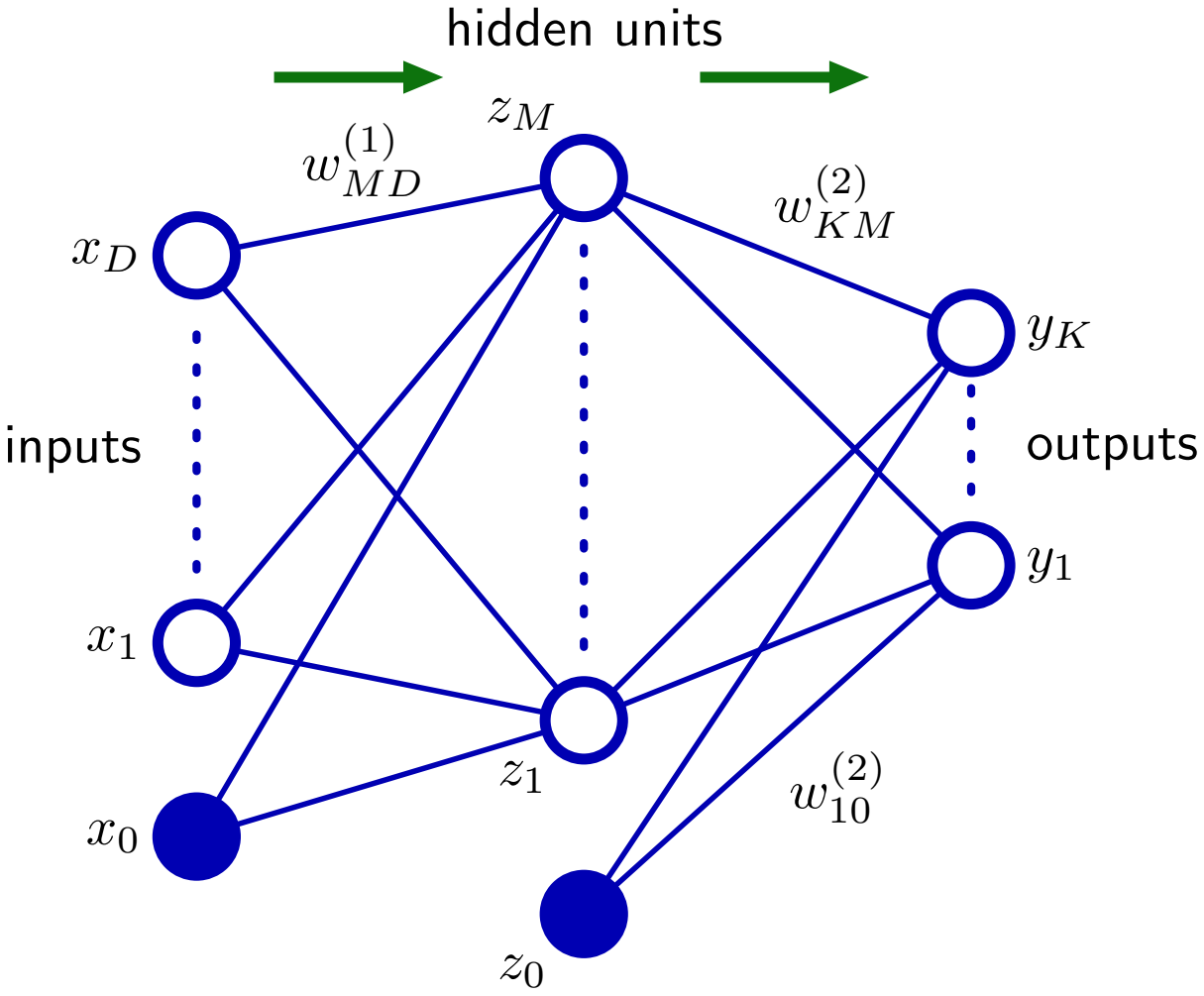


Figure: Chapter 5, Figure 1

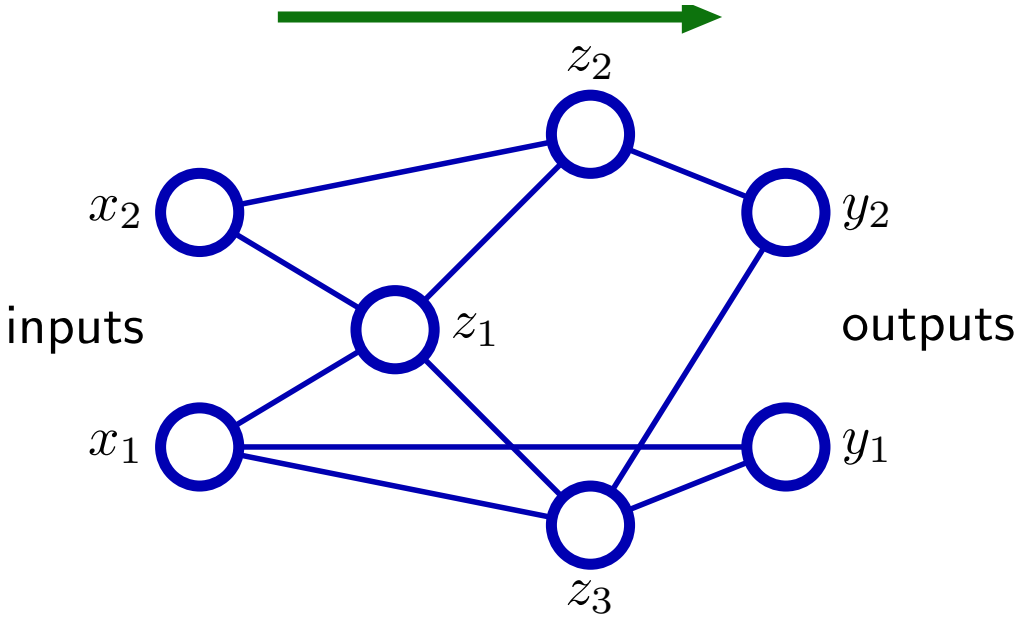


Figure: Chapter 5, Figure 2

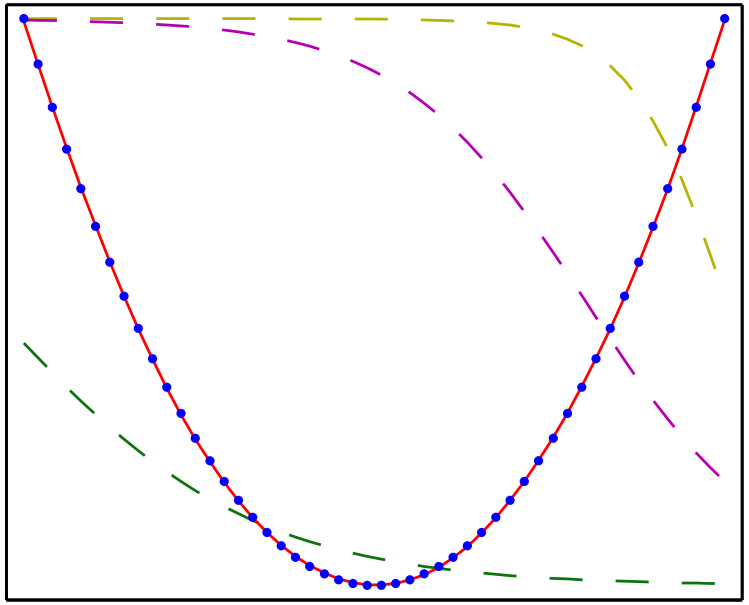


Figure: Chapter 5, Figure 3a

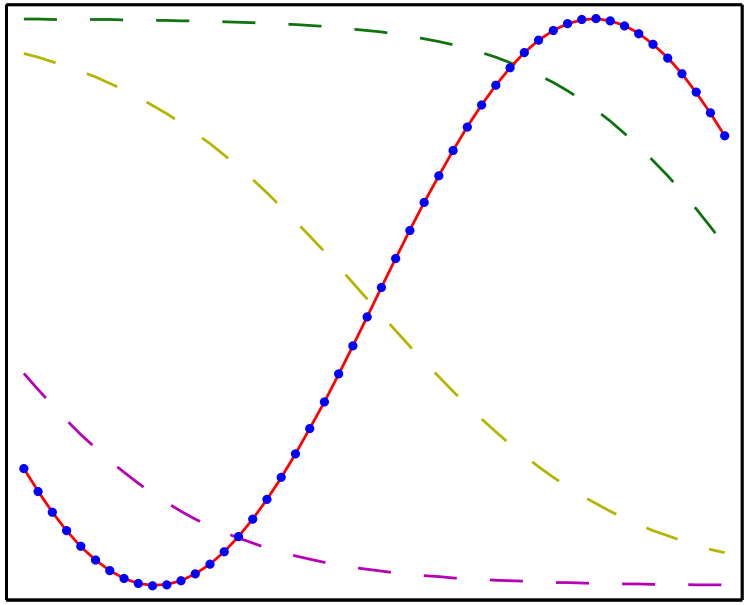


Figure: Chapter 5, Figure 3b

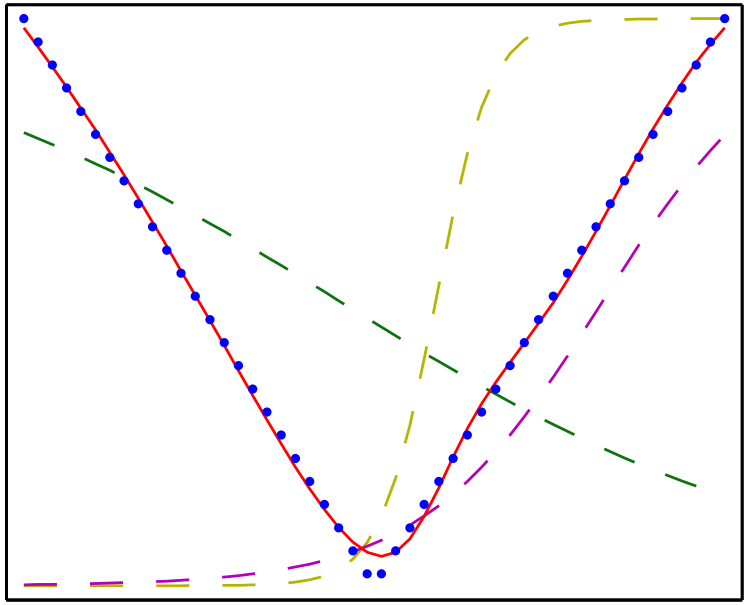
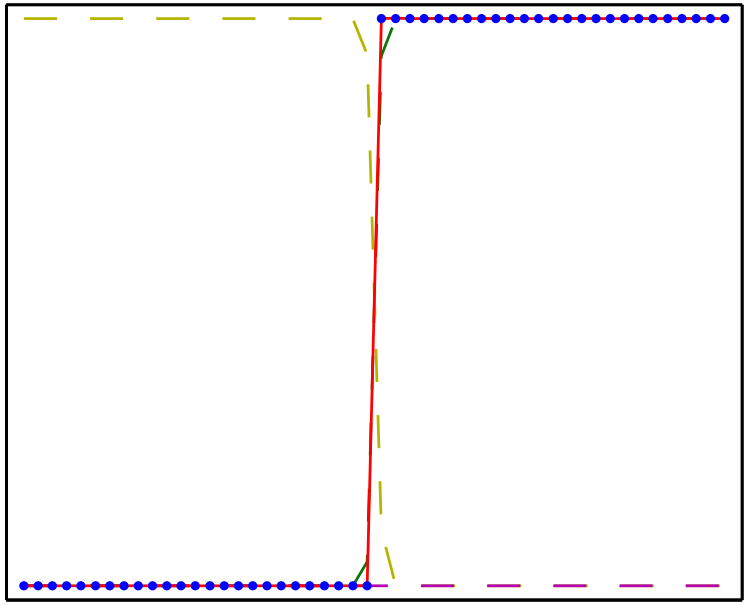


Figure: Chapter 5, Figure 3c



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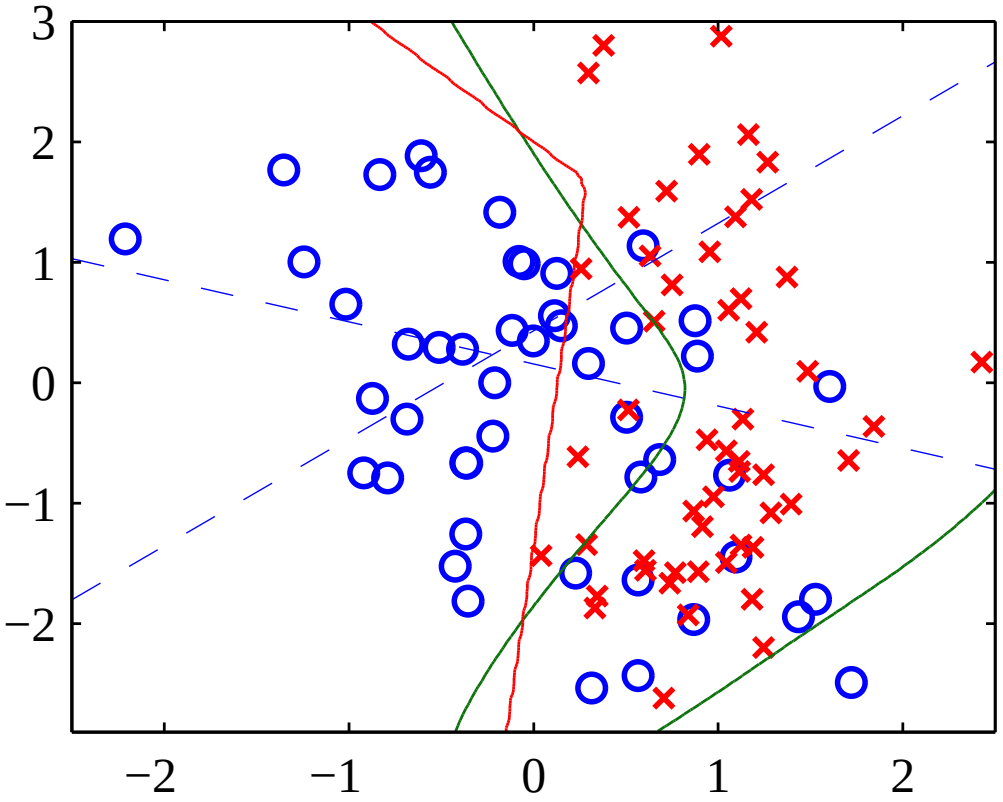


Figure: Chapter 5, Figure 4

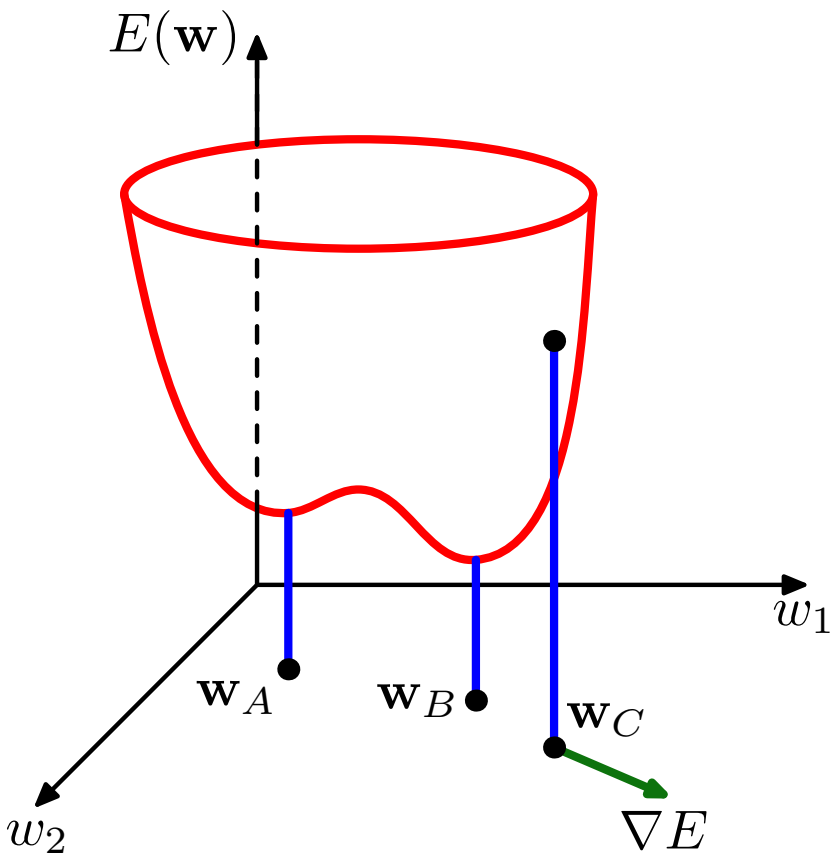
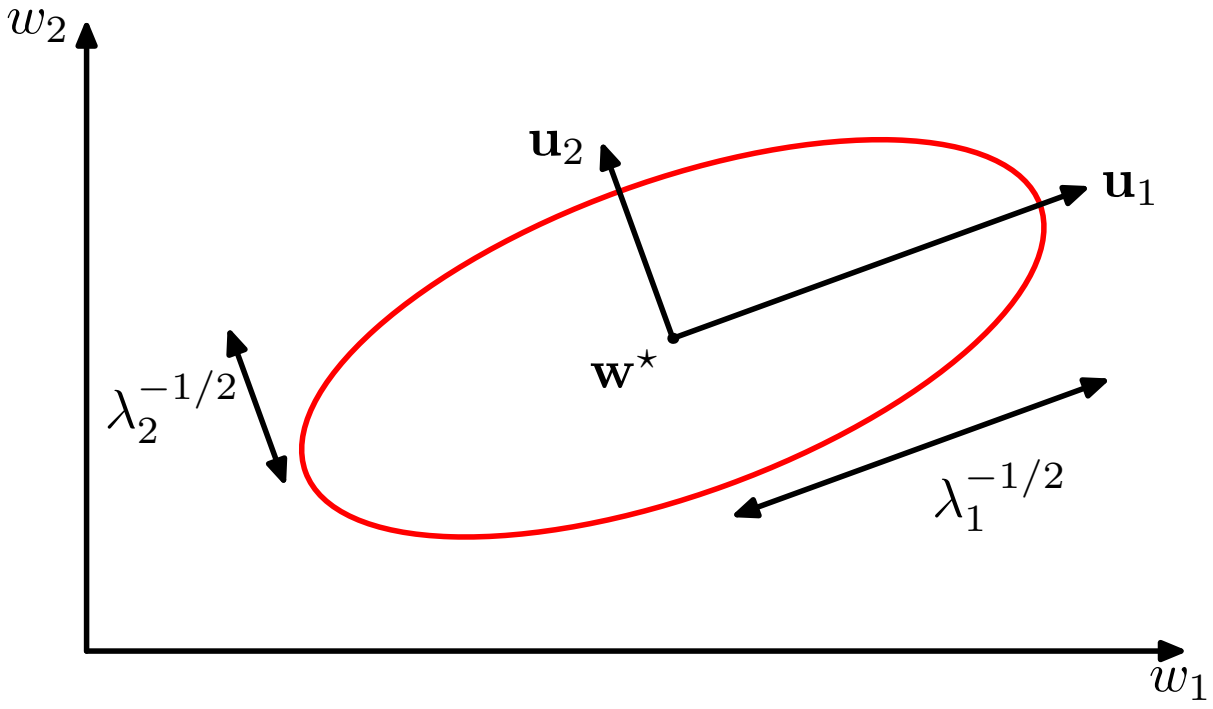


Figure: Chapter 5, Figure 5



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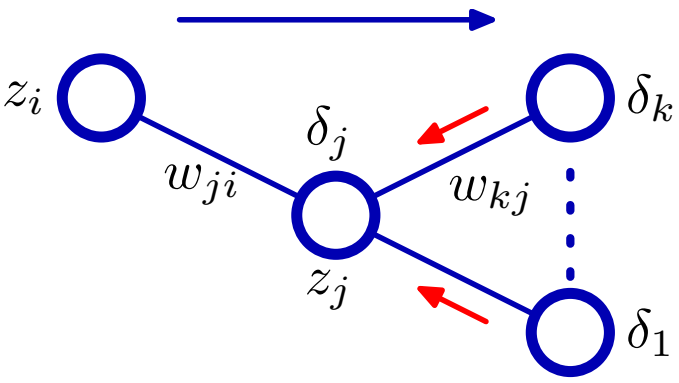

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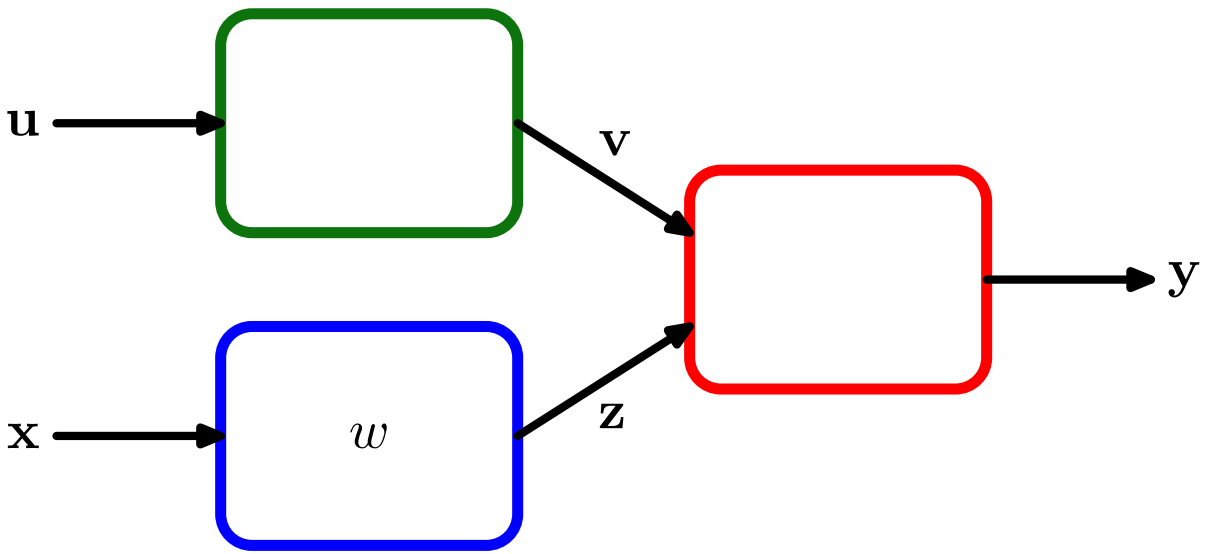

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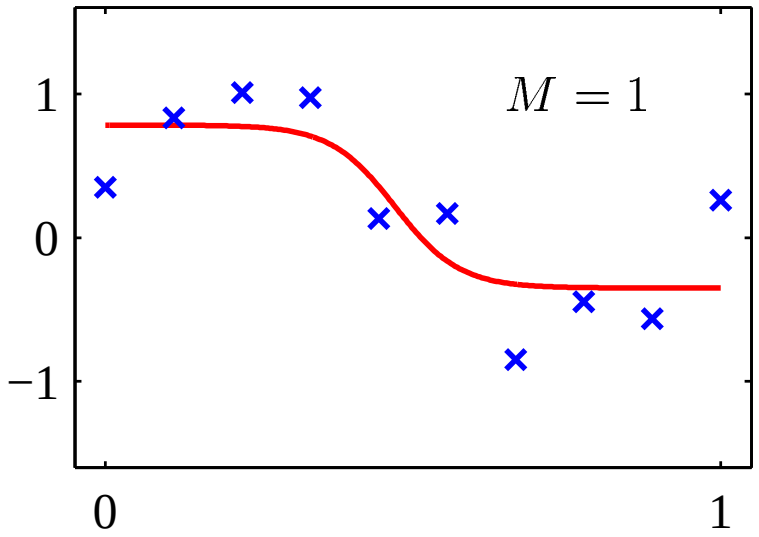

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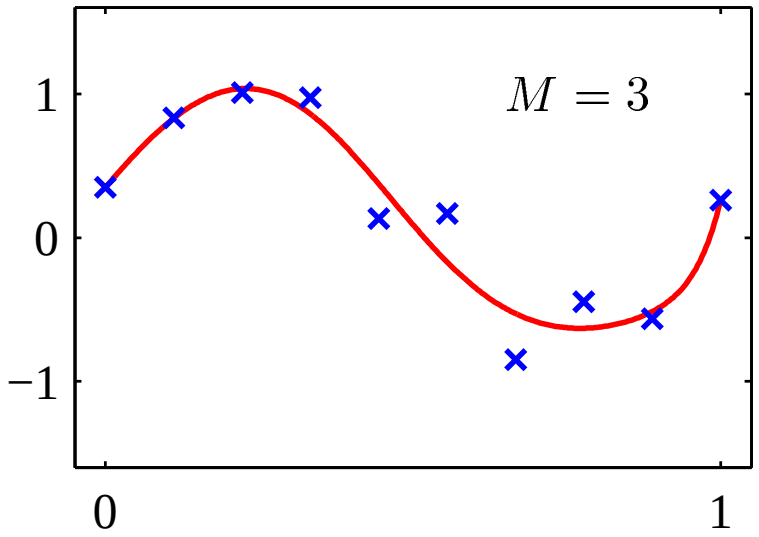

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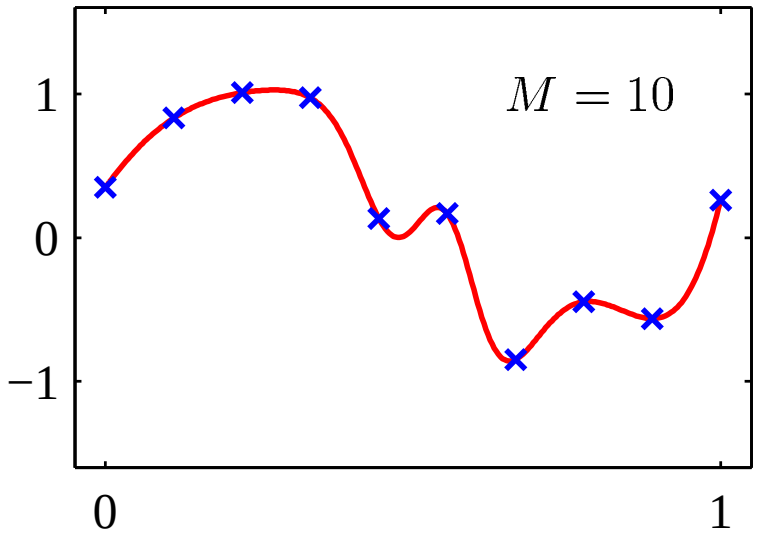

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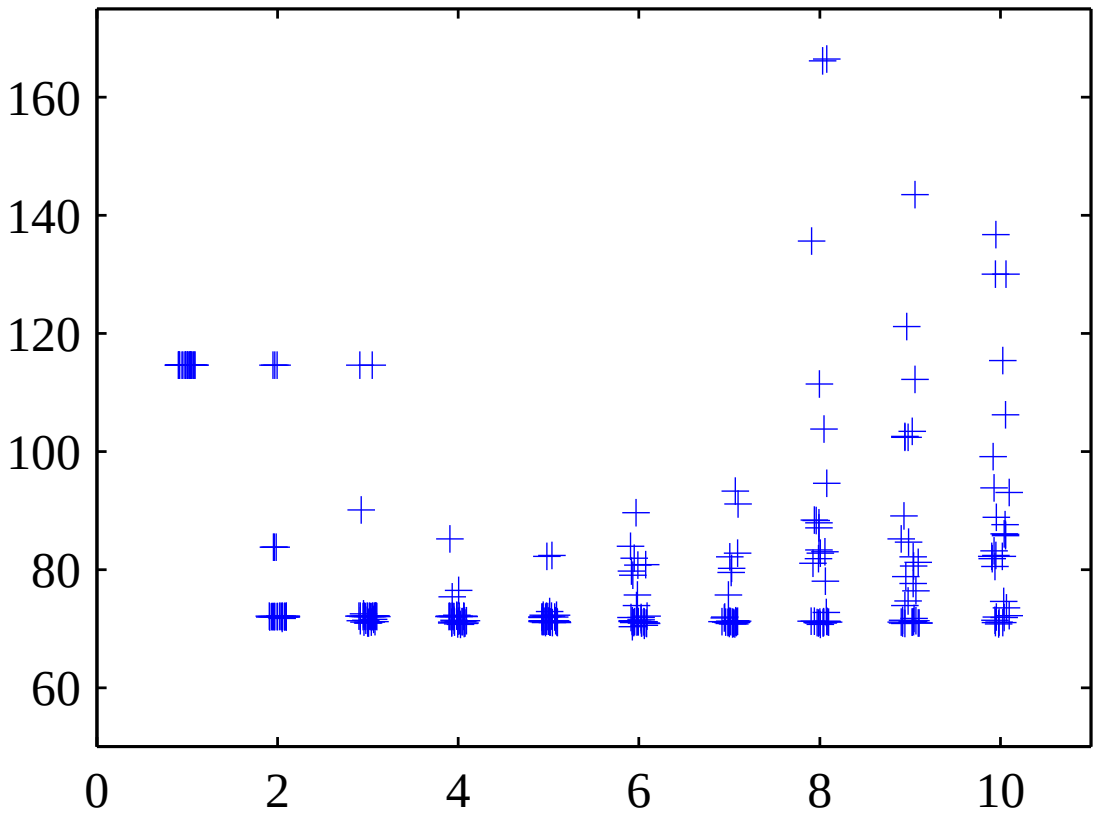

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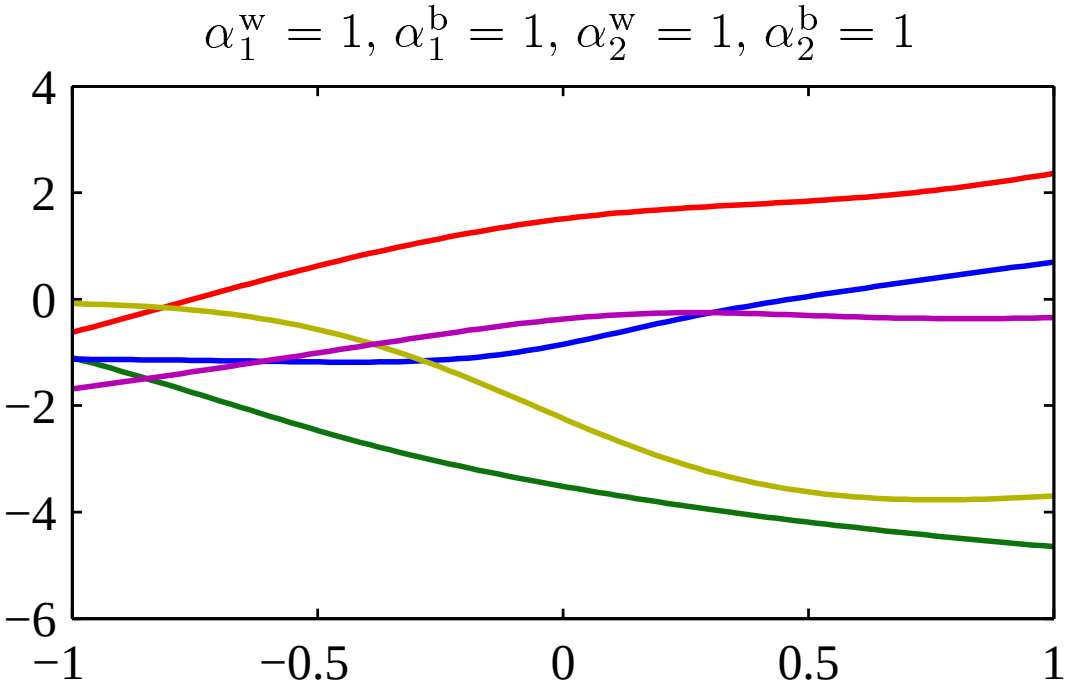


Figure: Chapter 5, Figure 11a

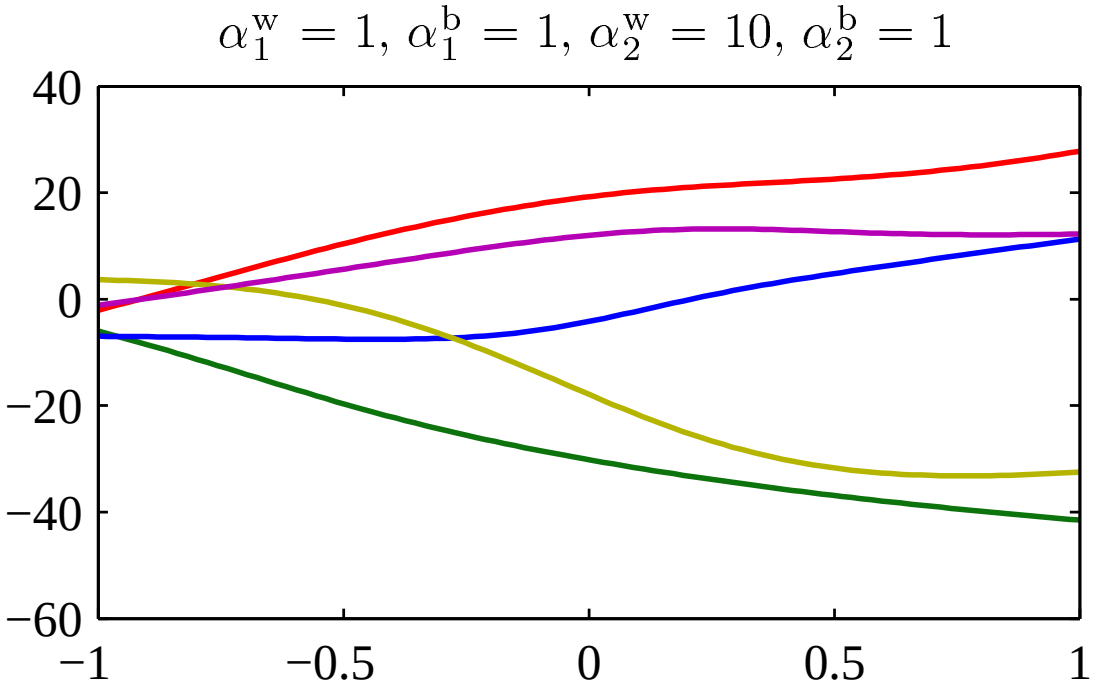
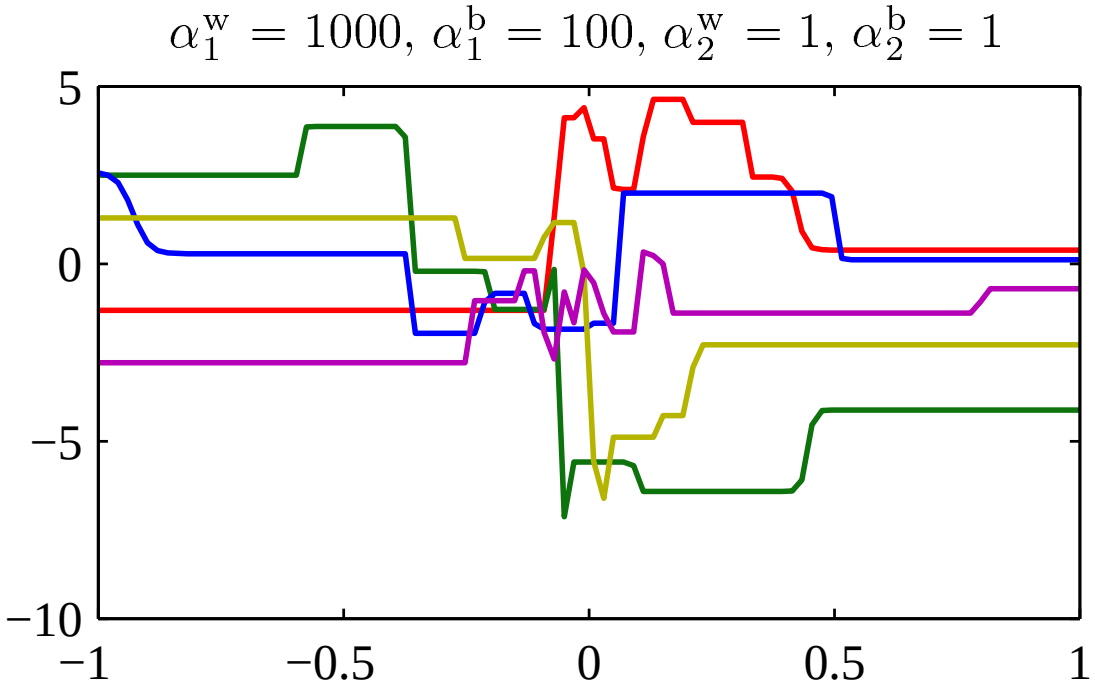


Figure: Chapter 5, Figure 11b



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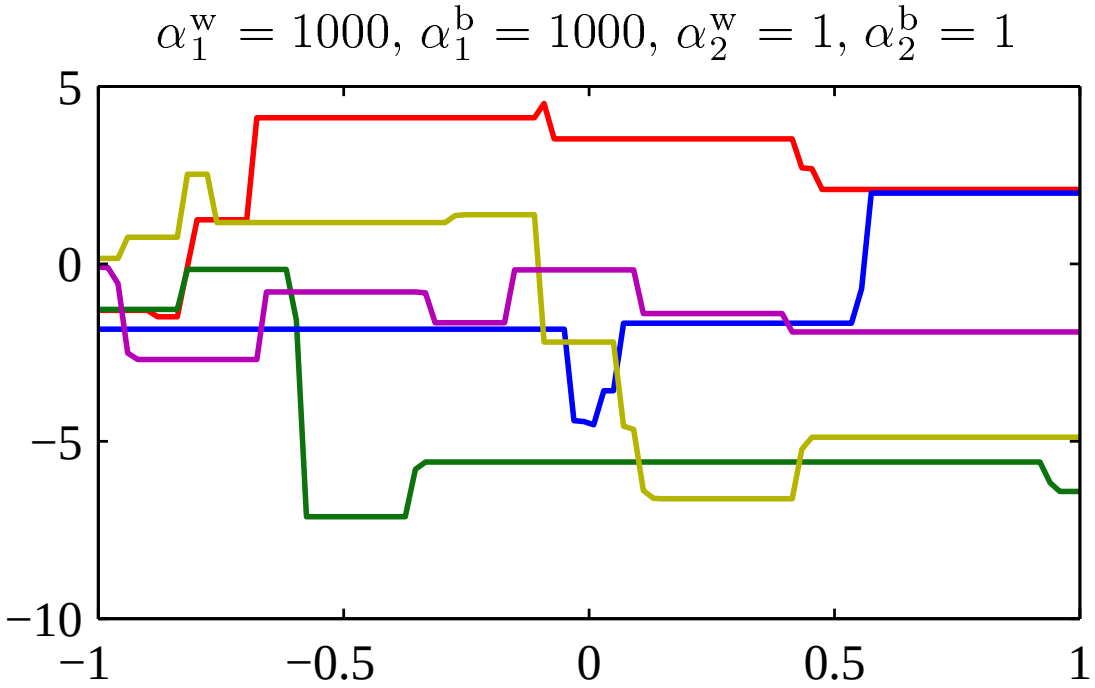

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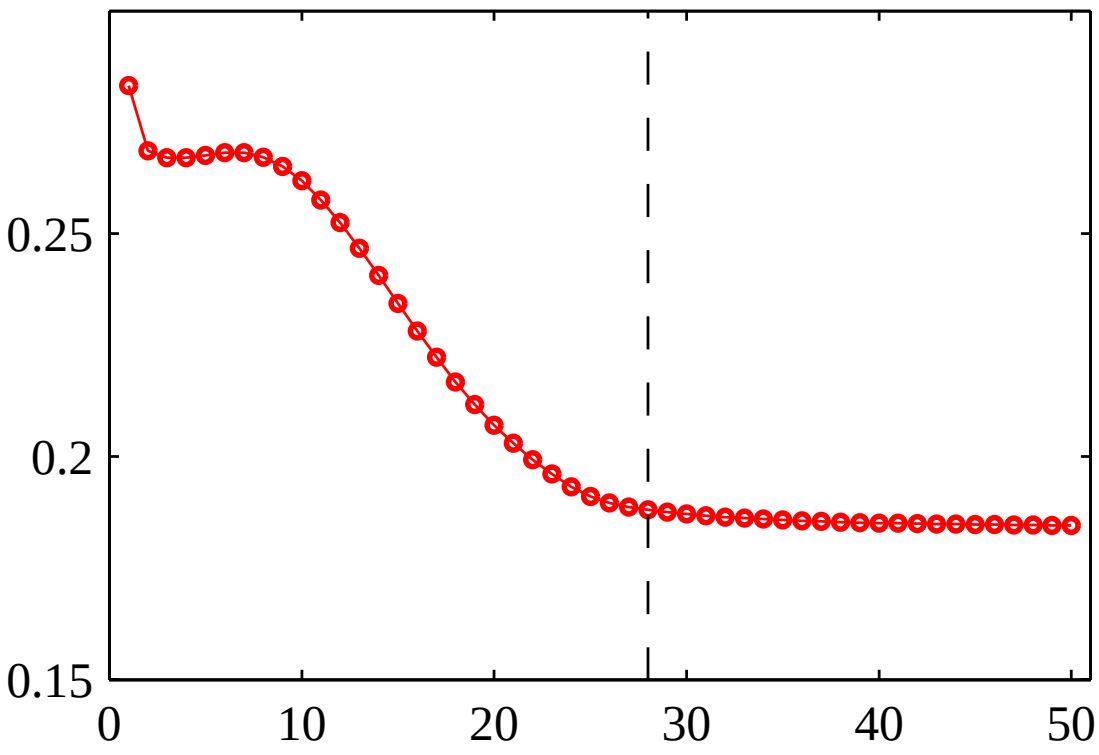

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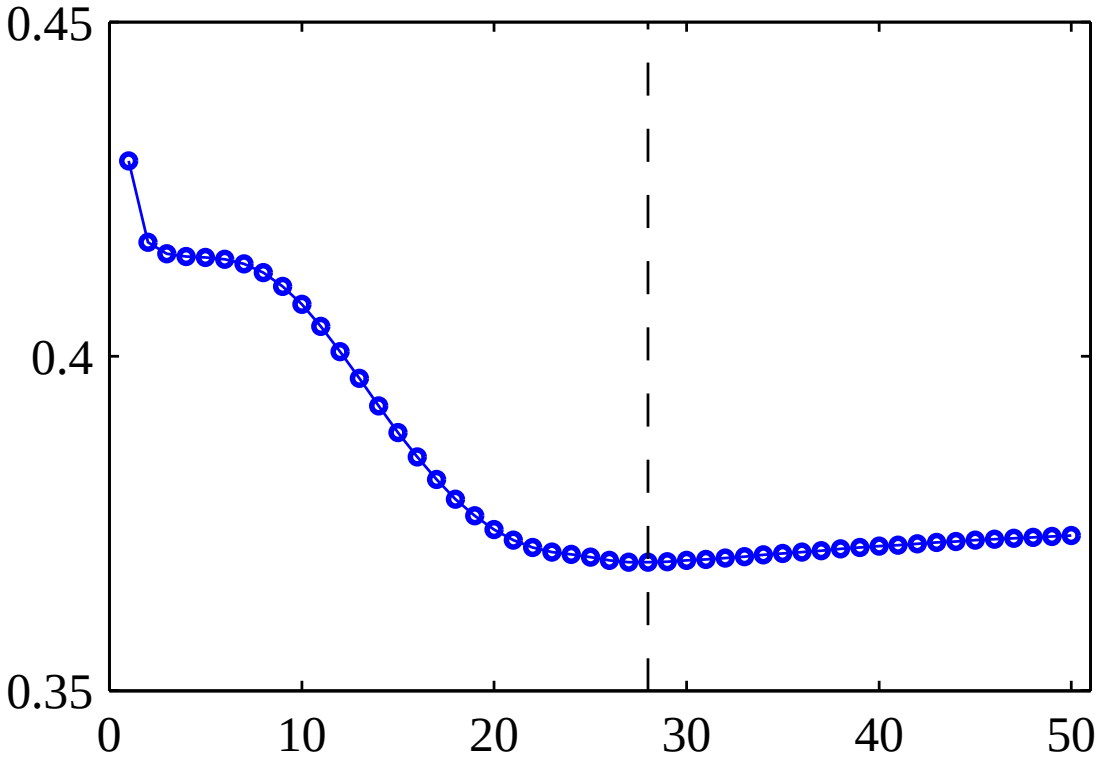

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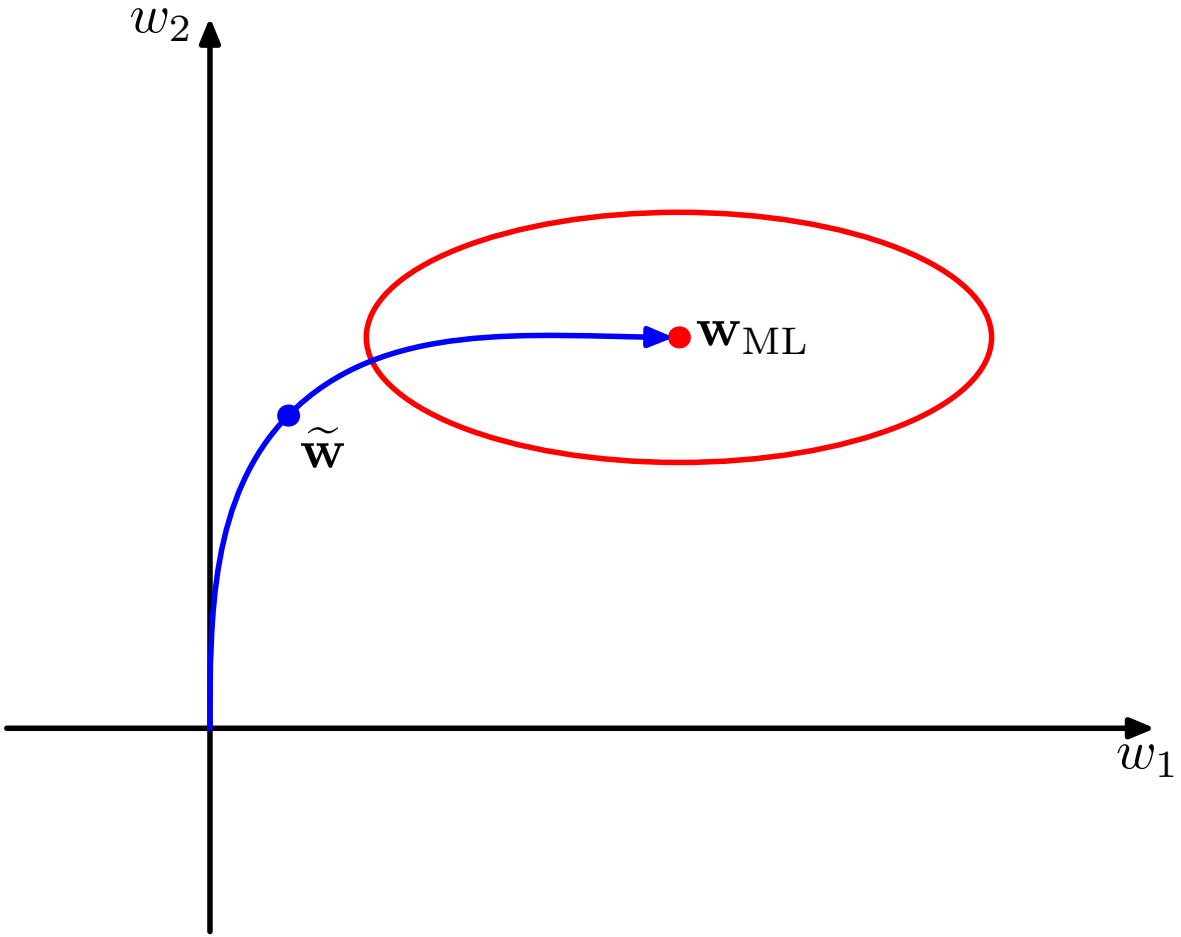


Figure: Chapter 5, Figure 13

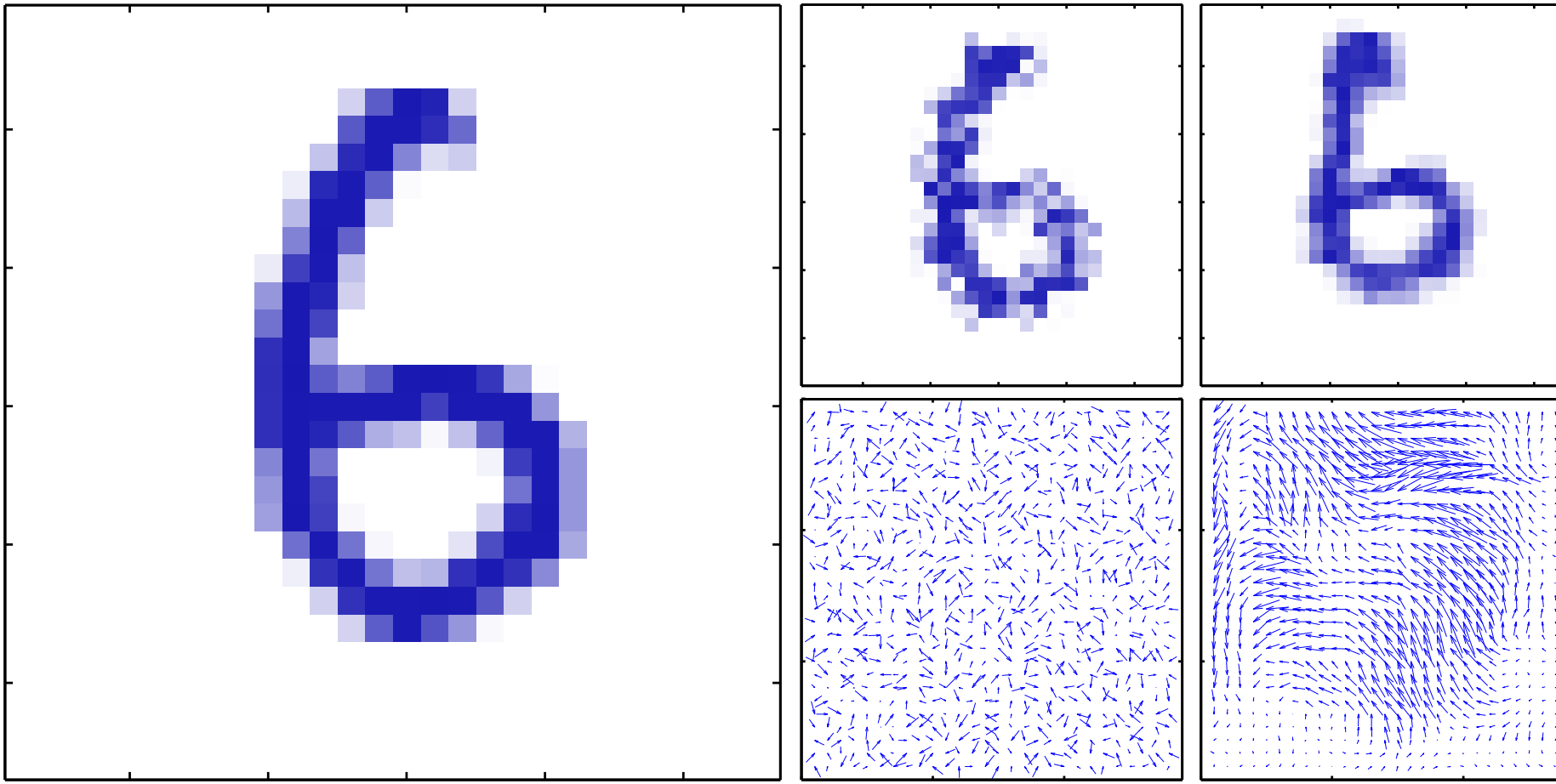
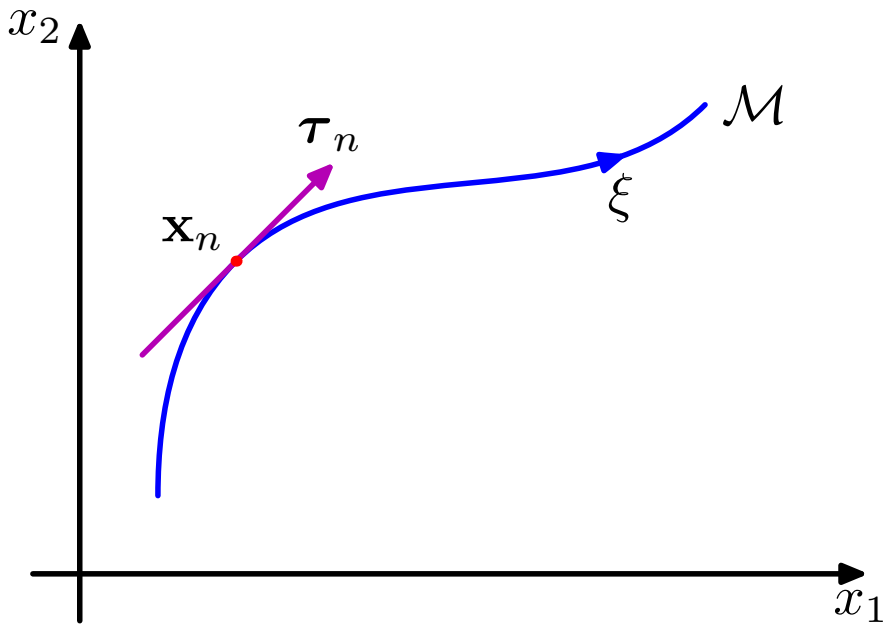


Figure: Chapter 5, Figure 14



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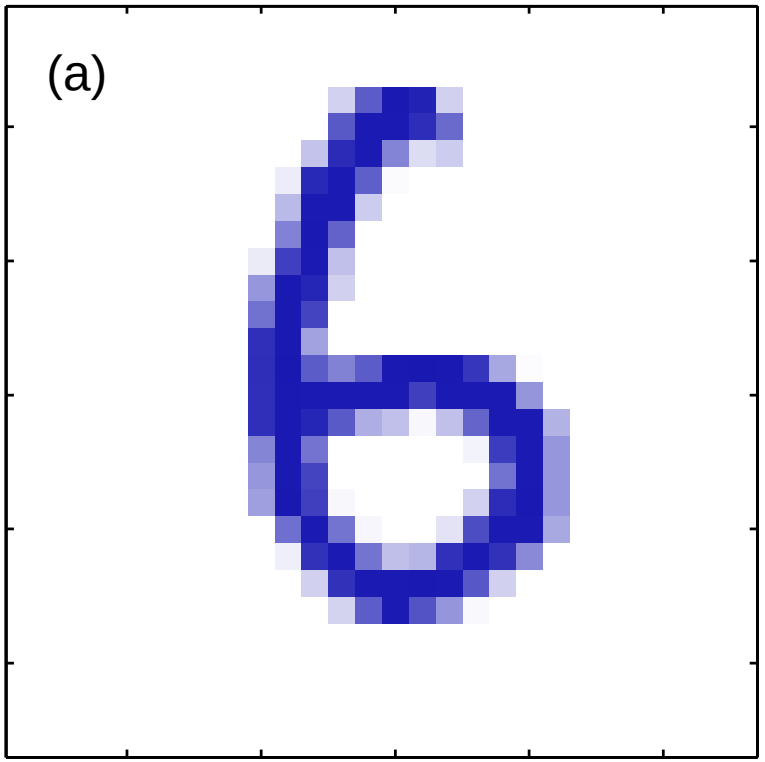

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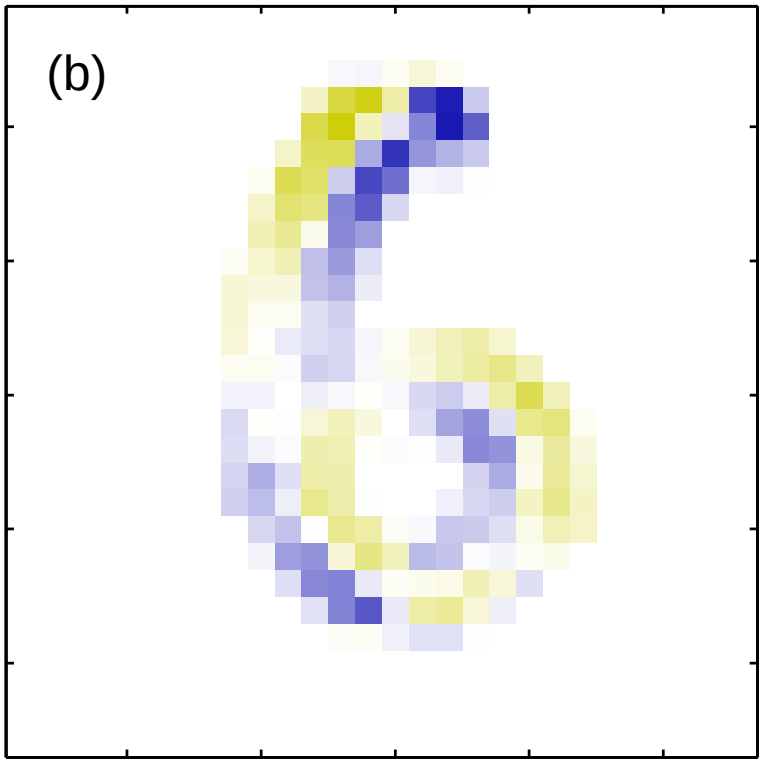

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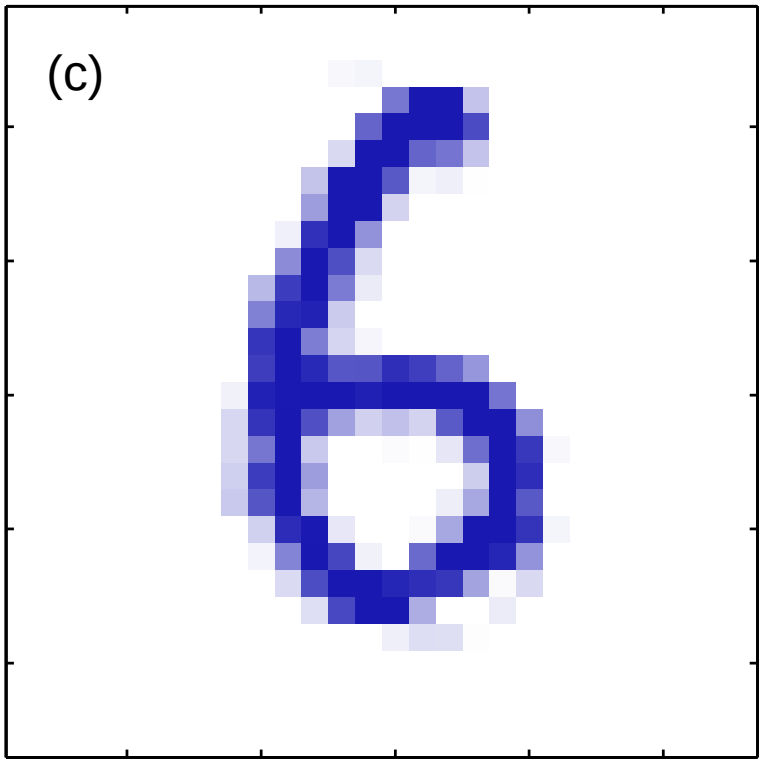

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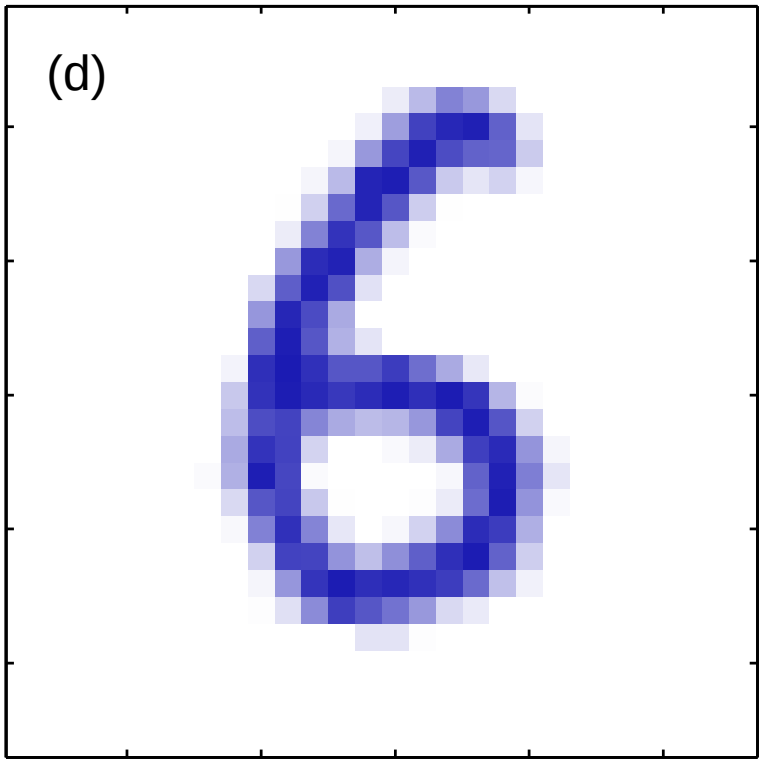

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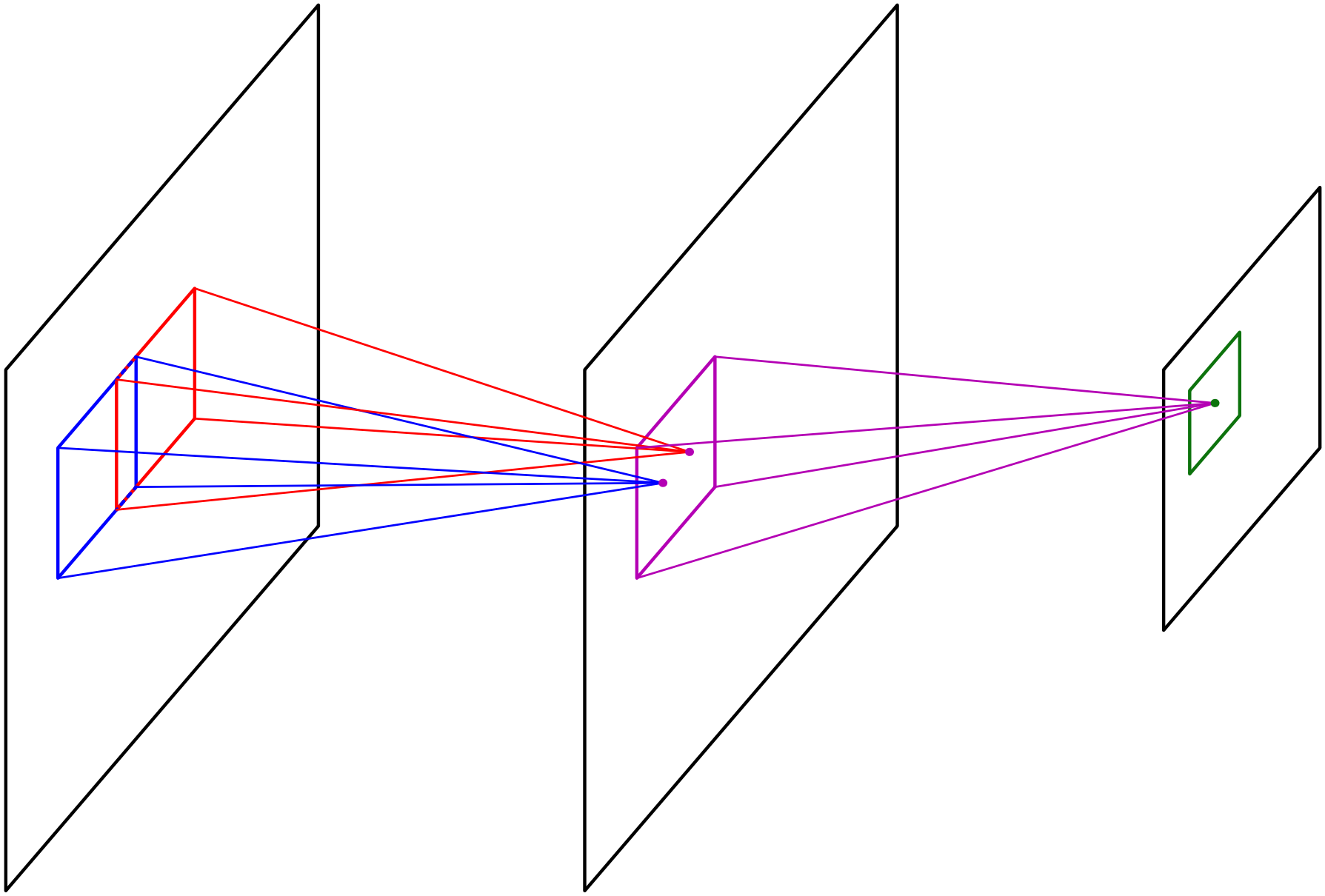
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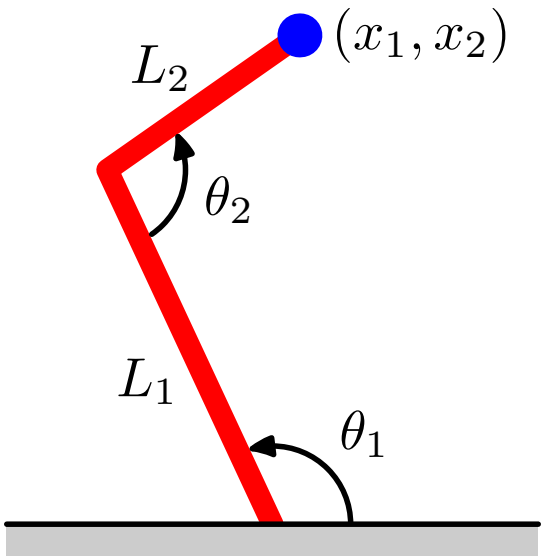

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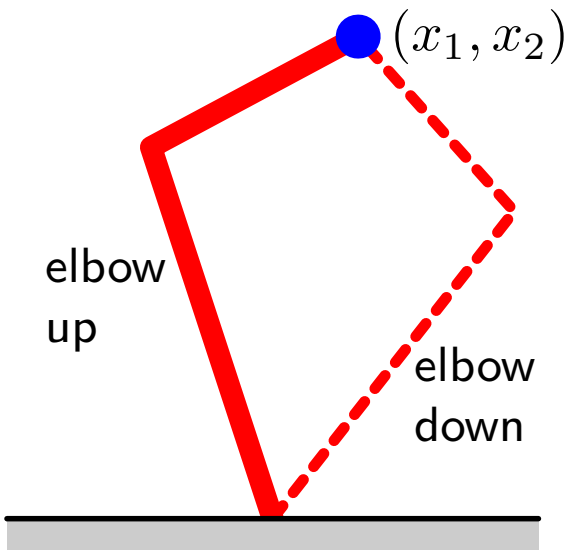
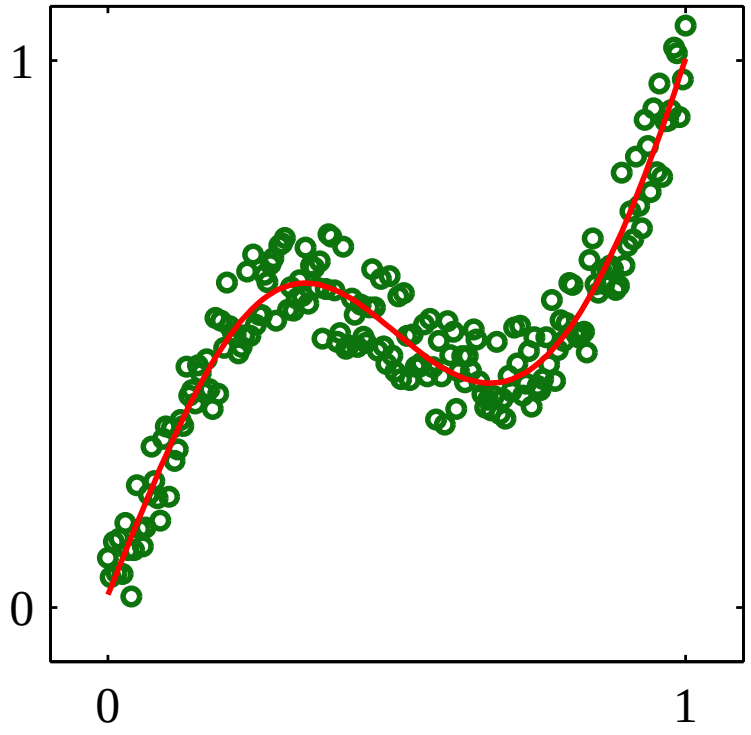


Figure: Chapter 5, Figure 18b



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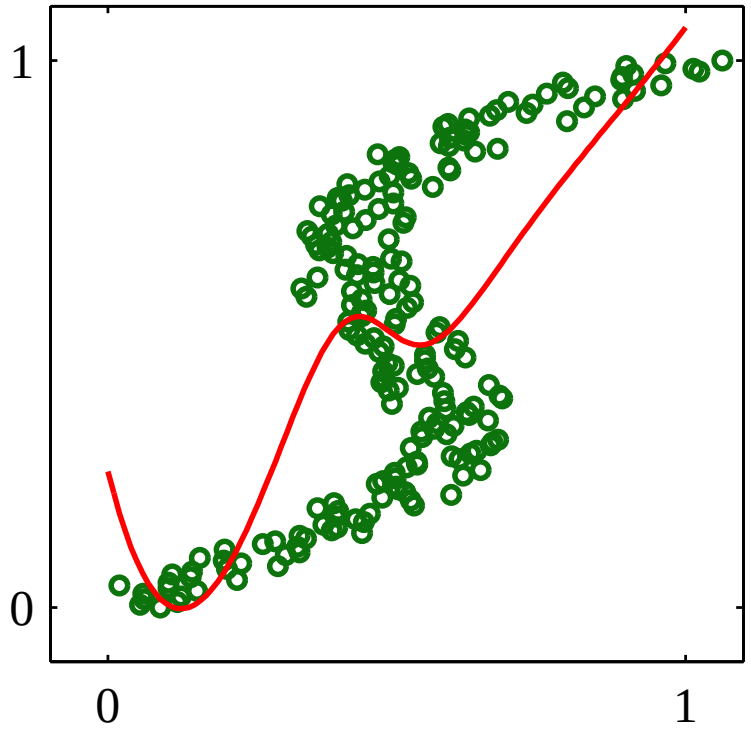

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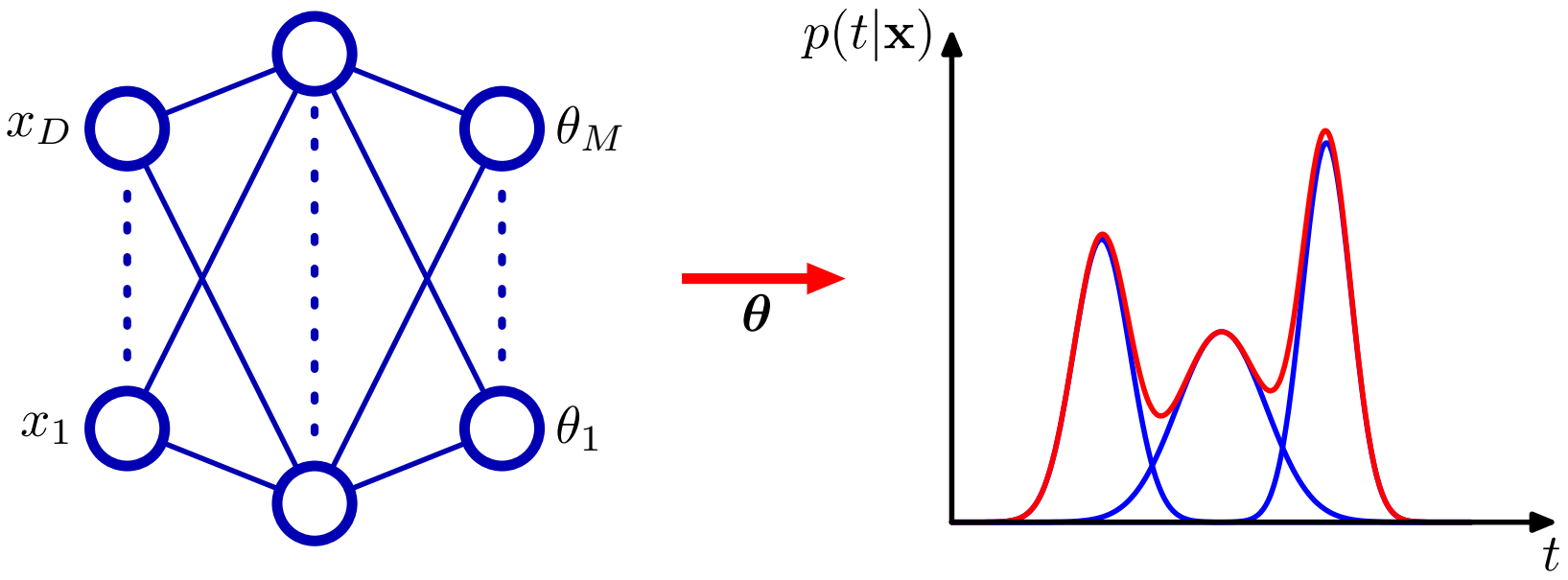

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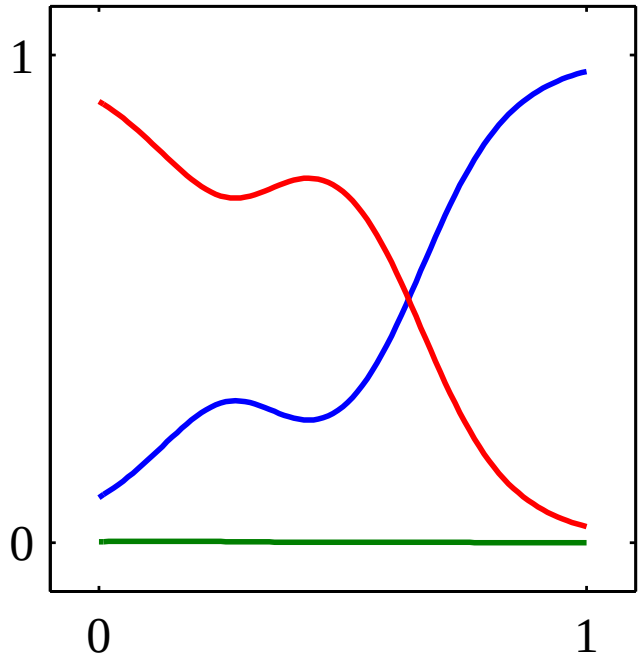
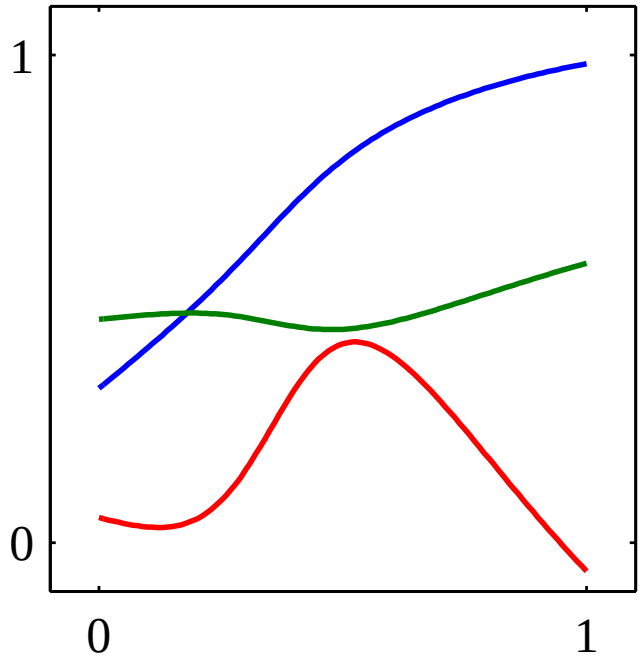


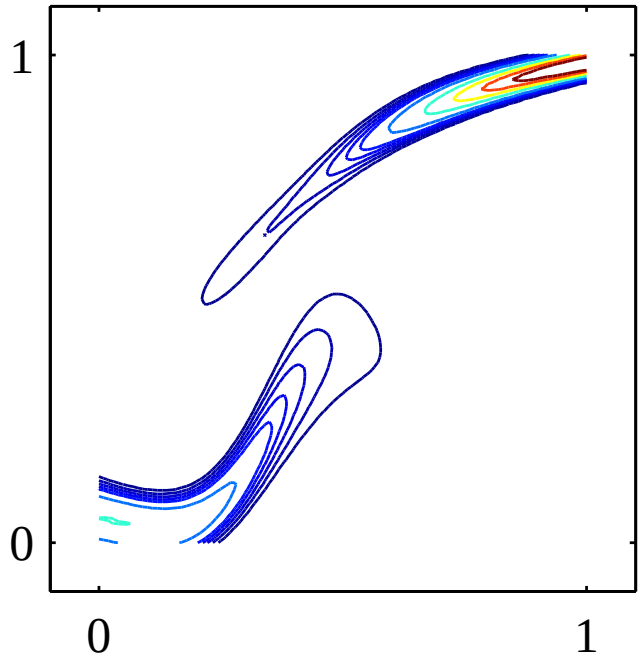
(a)

Figure: Chapter 5, Figure 21a



(b)

Figure: Chapter 5, Figure 21b



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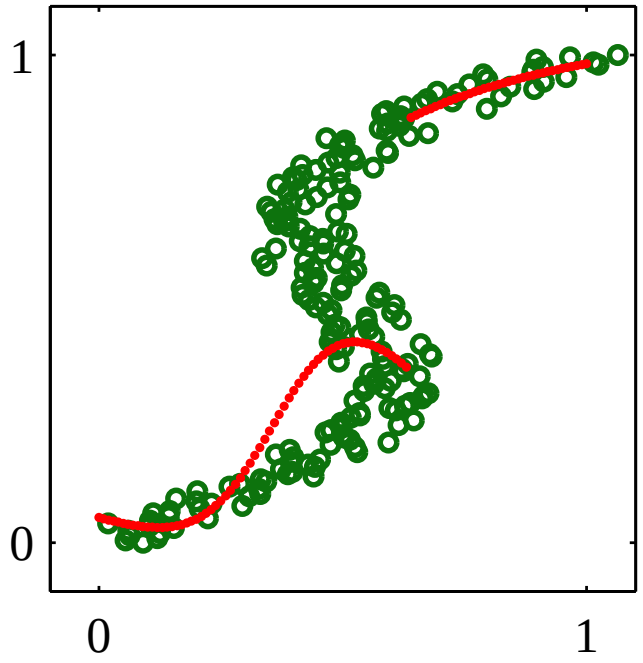

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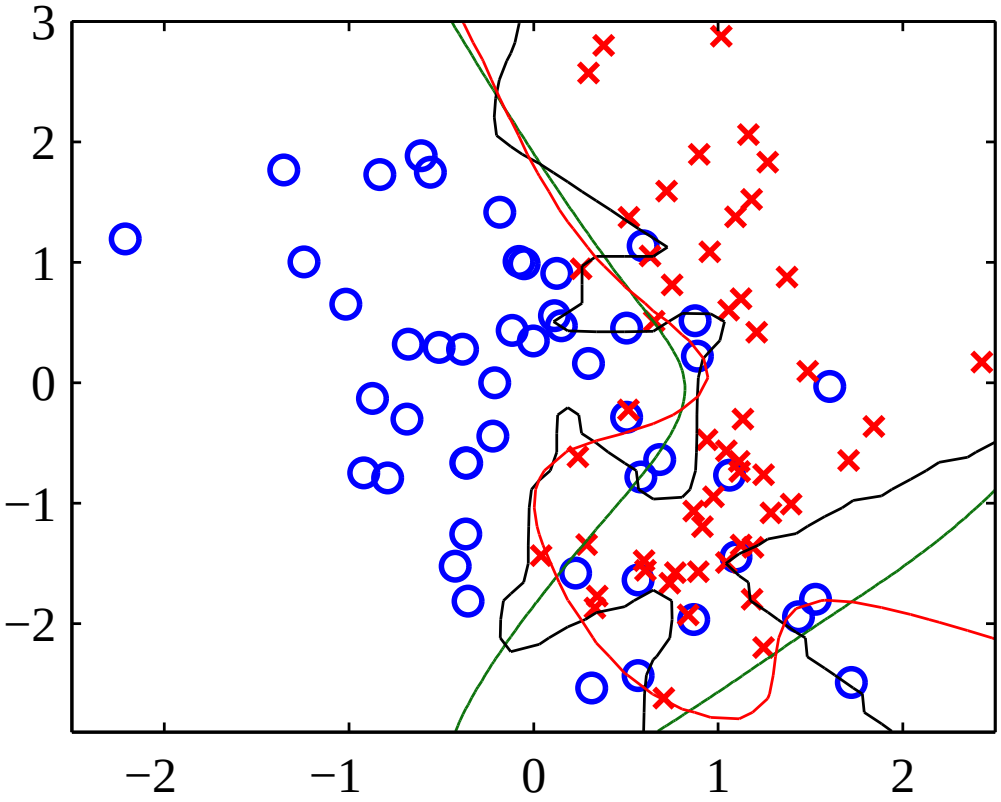
Figure: Chapter 5, Figure 21d



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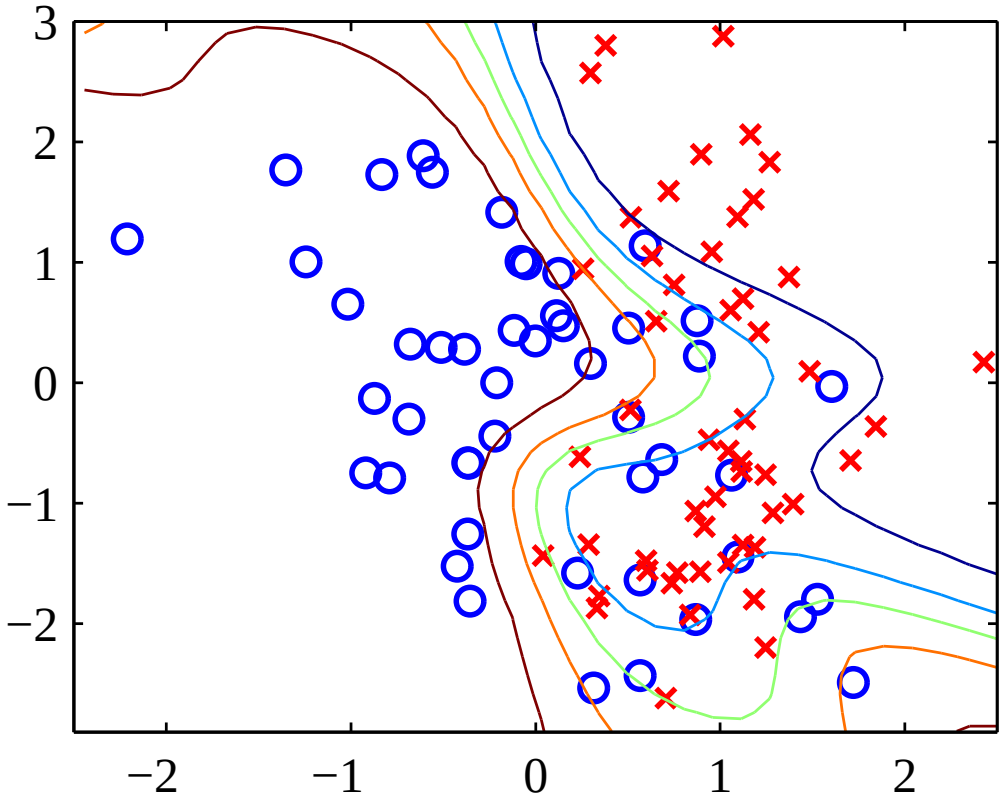

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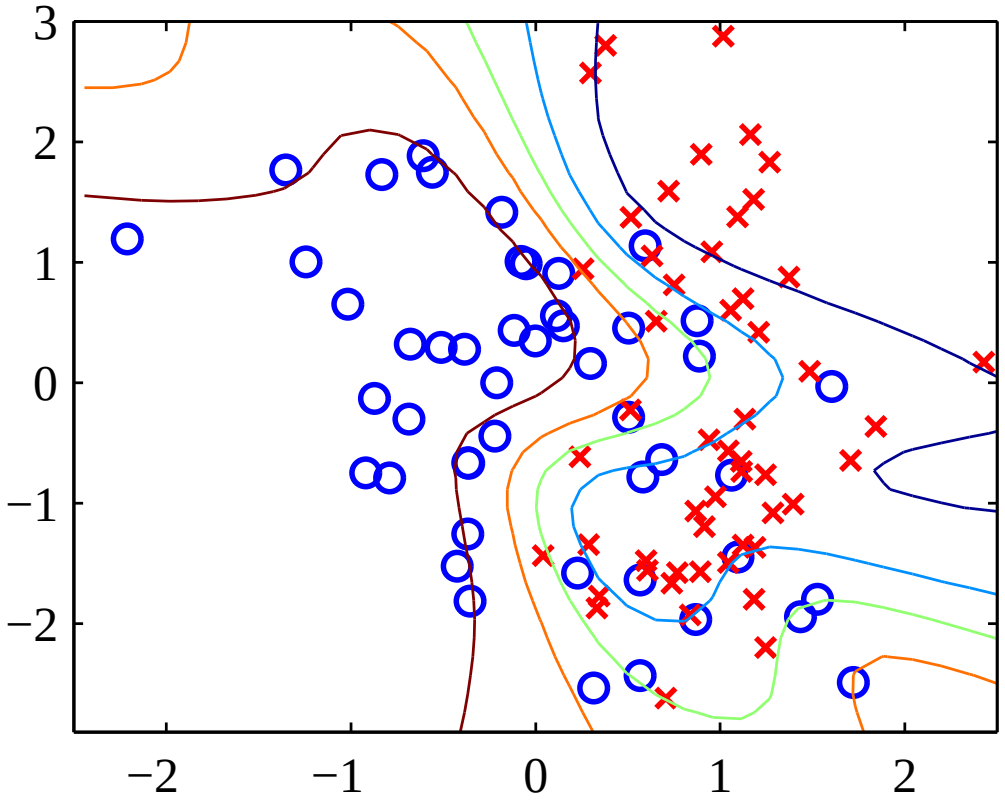


Figure: Chapter 5, Figure 23b

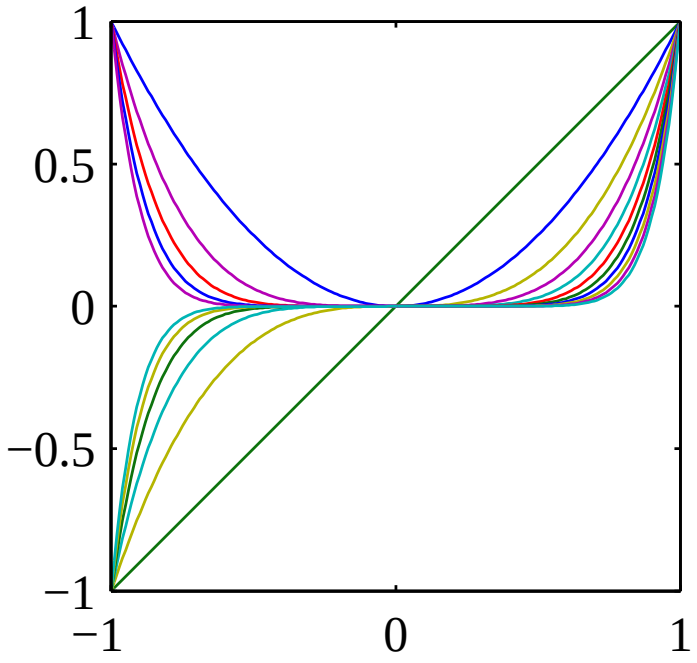
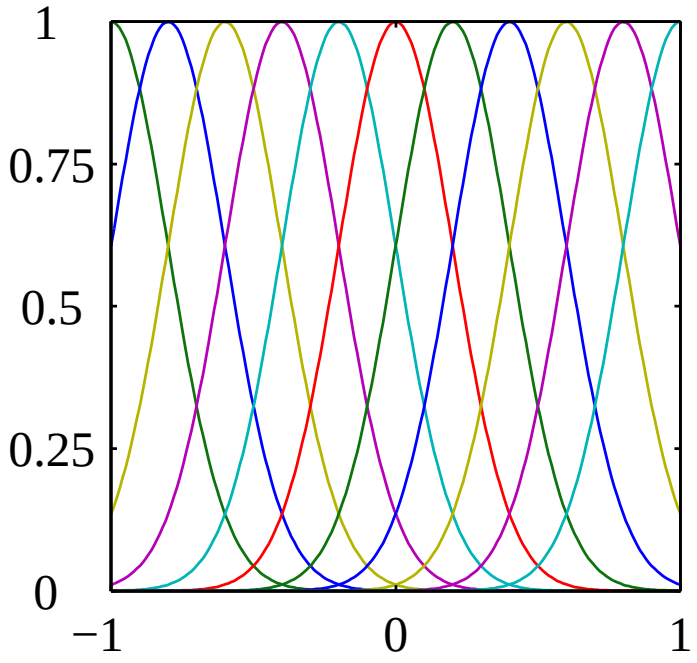


Figure: Chapter 6, Figure 1a



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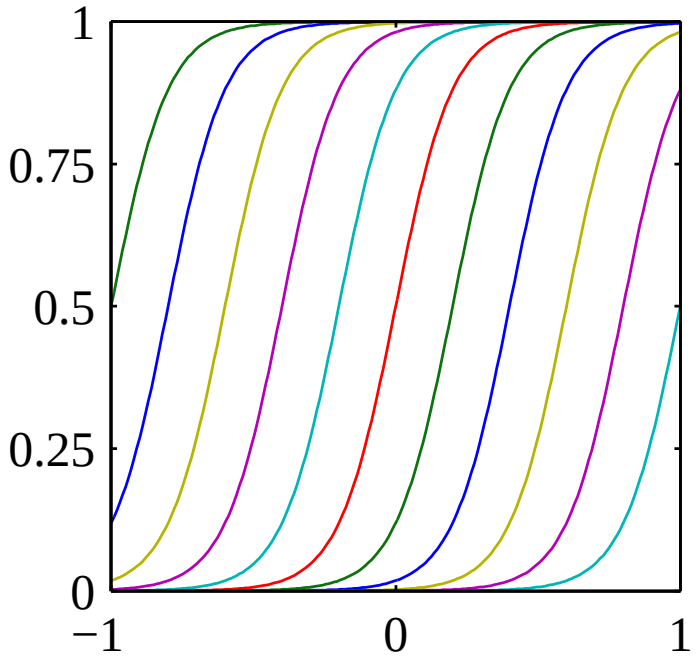

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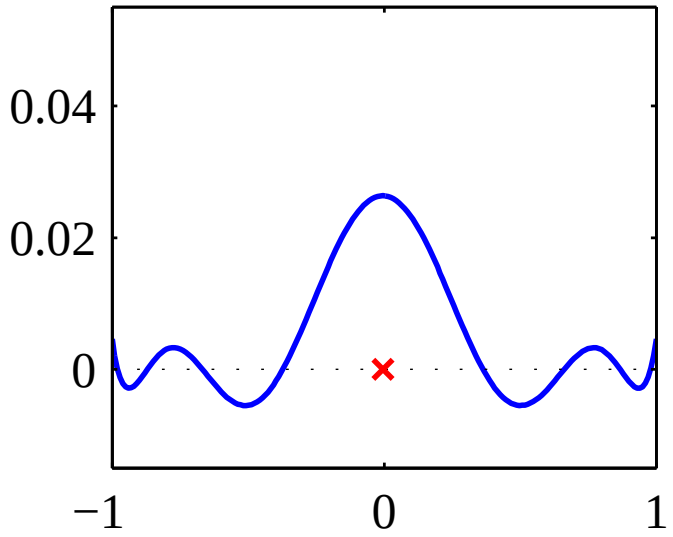

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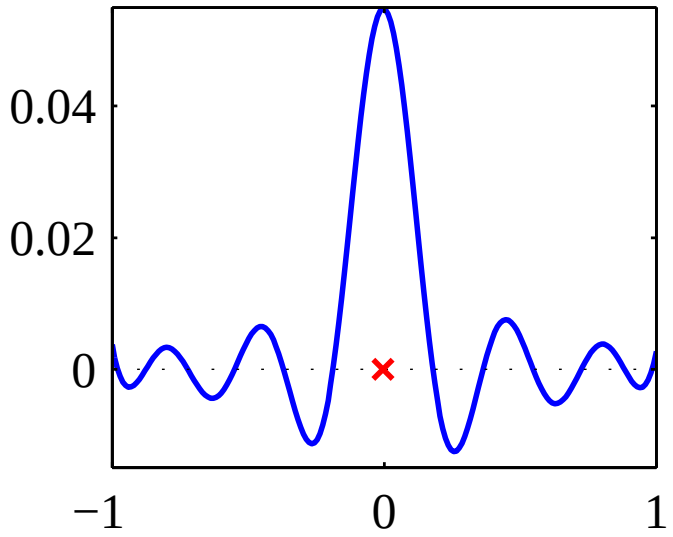

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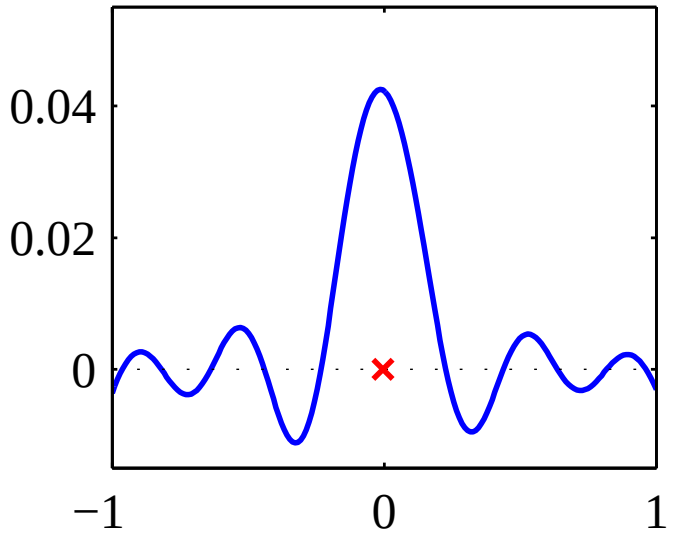


Figure: Chapter 6, Figure 1f

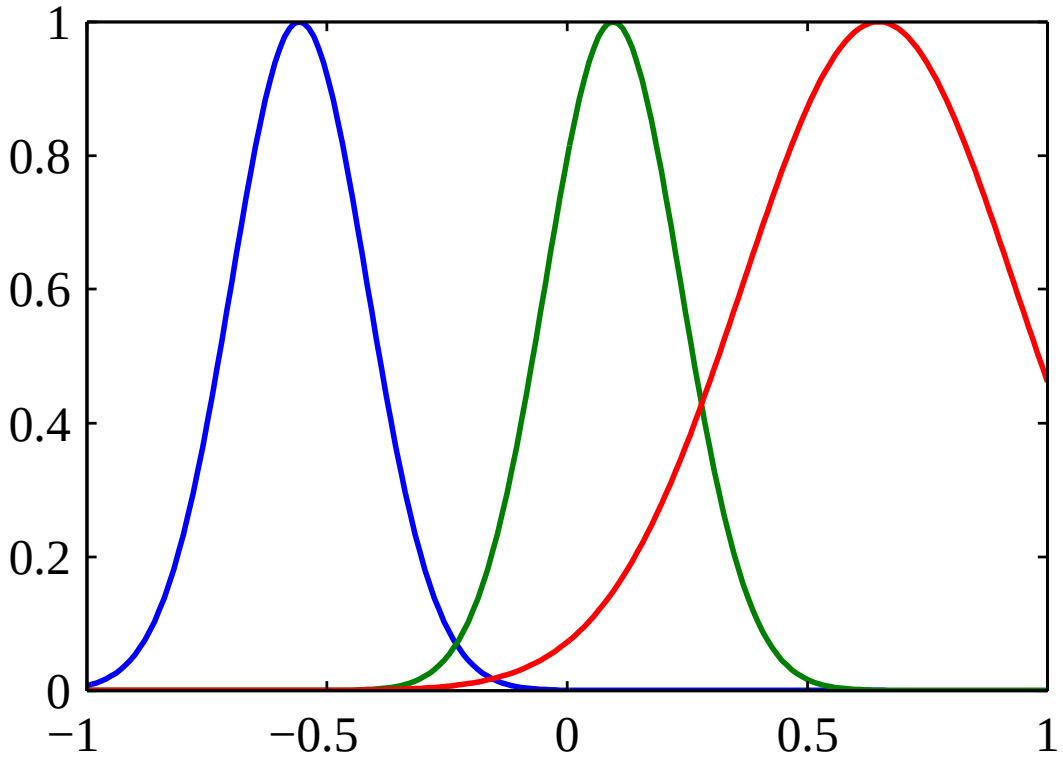


Figure: Chapter 6, Figure 2a

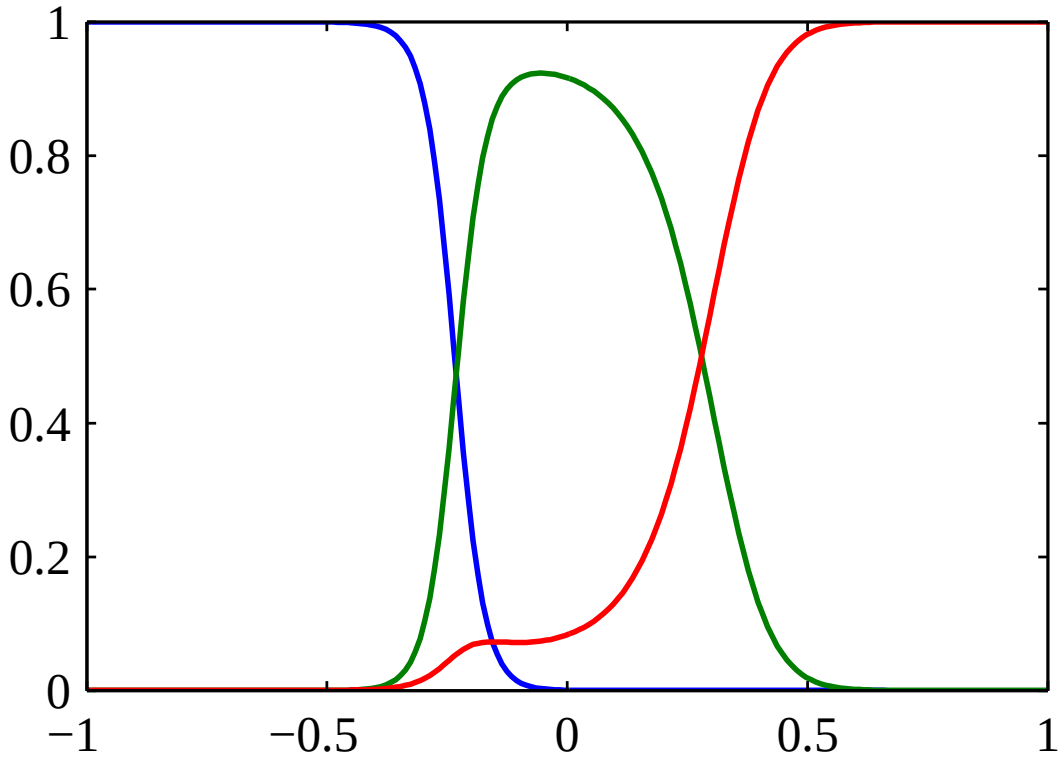


Figure: Chapter 6, Figure 2b

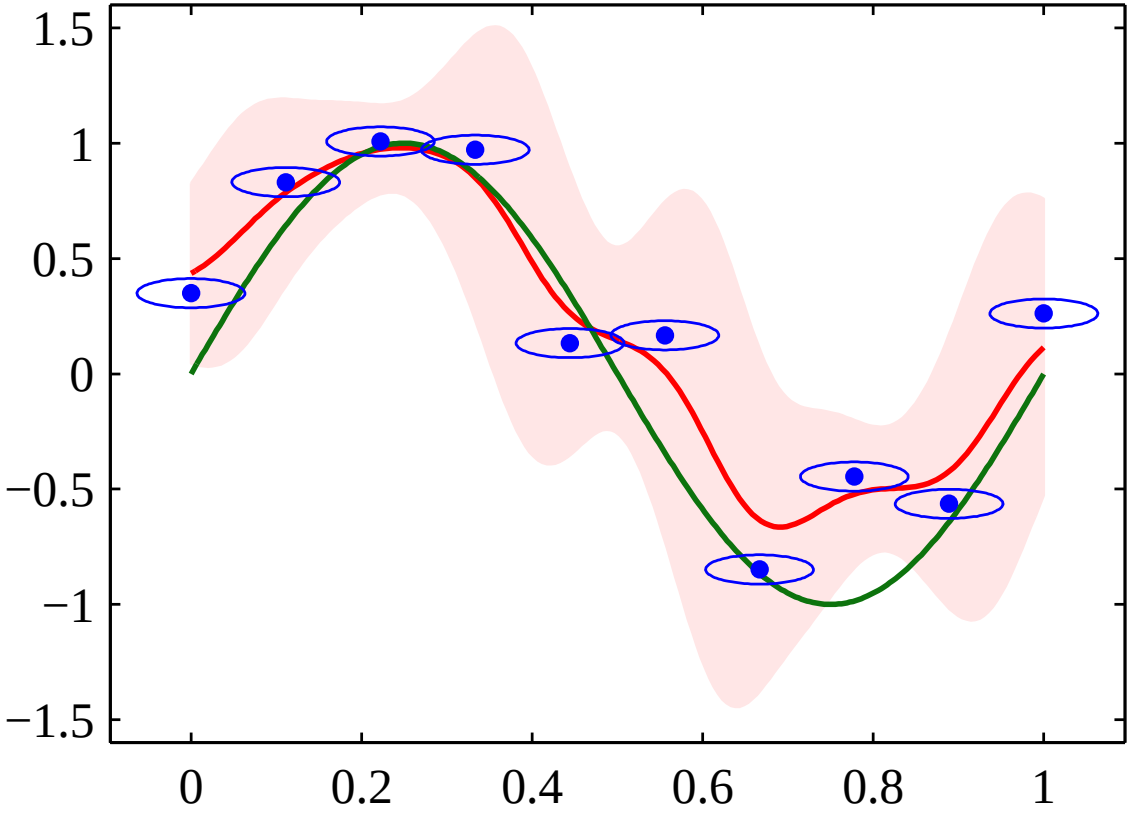
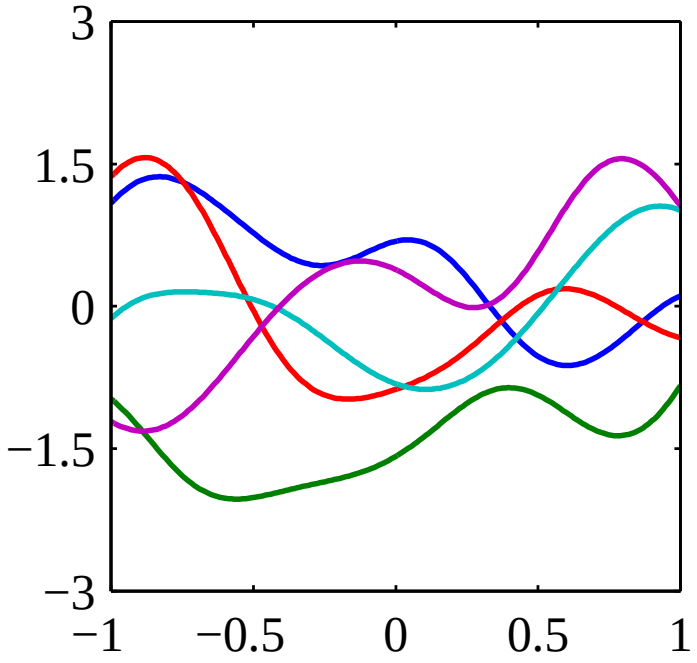


Figure: Chapter 6, Figure 3



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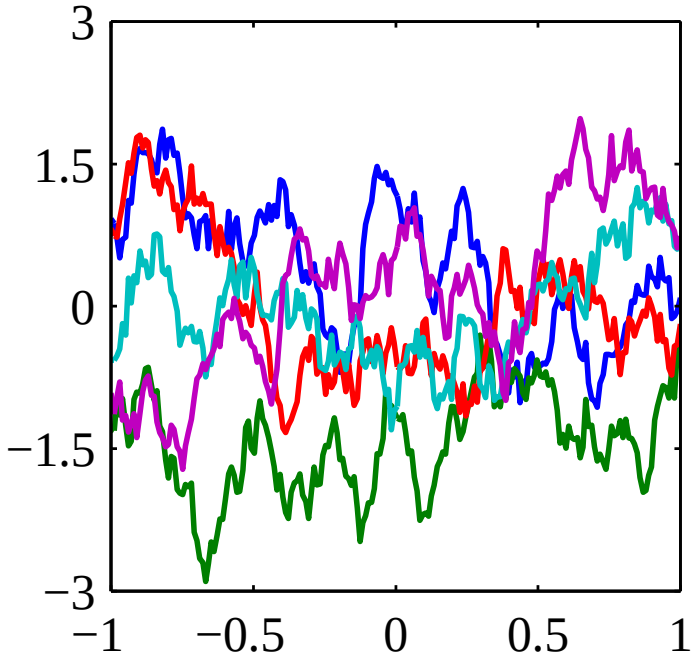
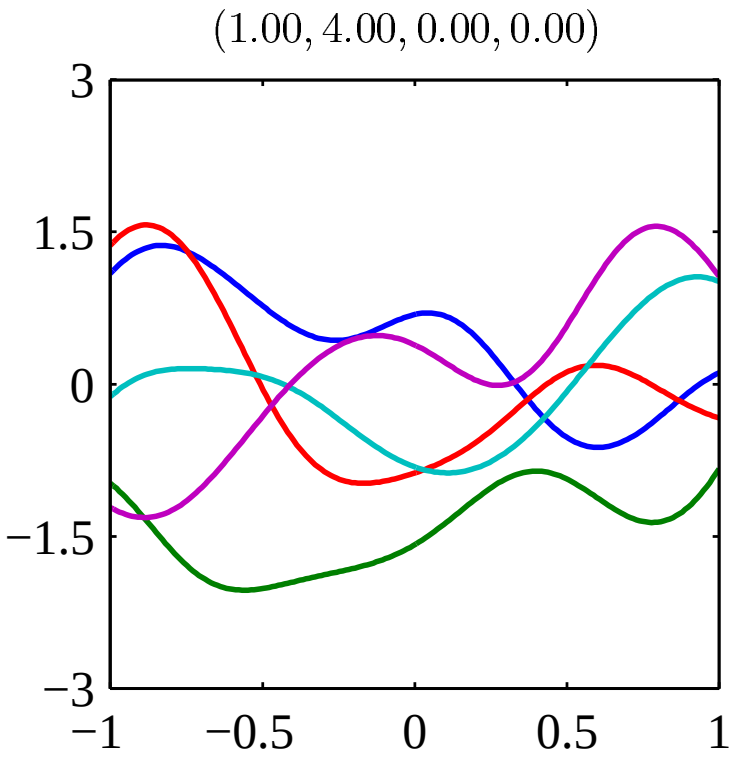


Figure: Chapter 6, Figure 4b



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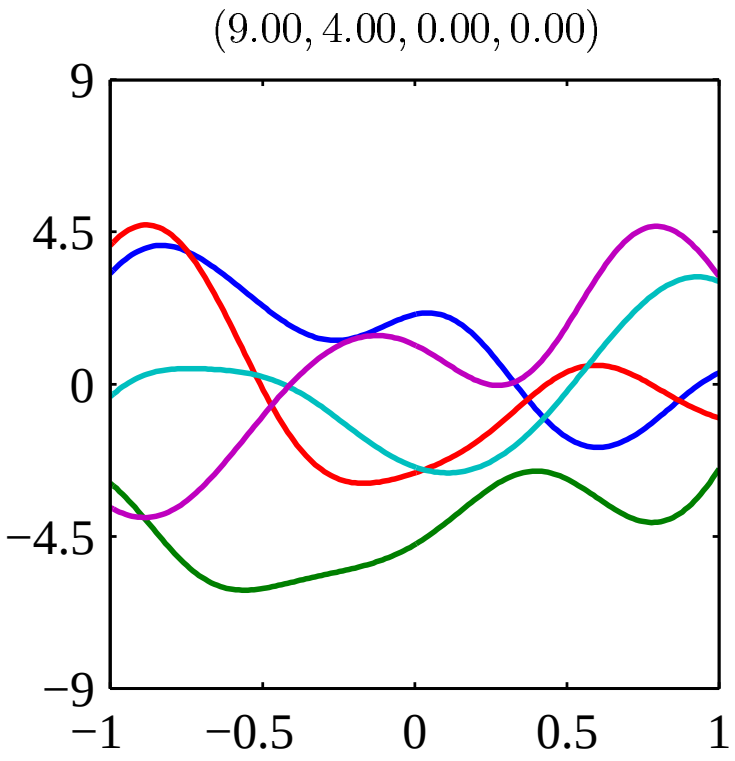
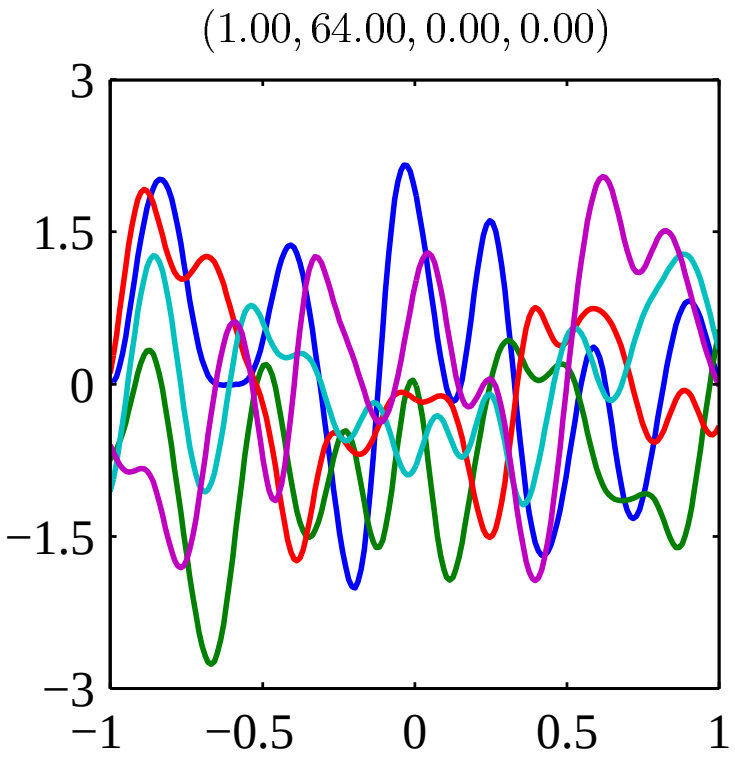


Figure: Chapter 6, Figure 5b



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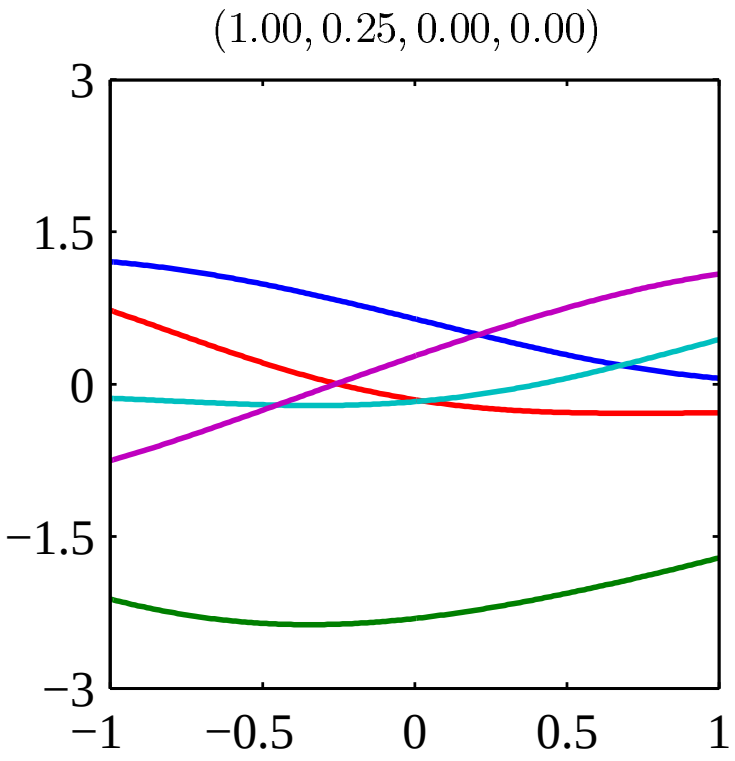

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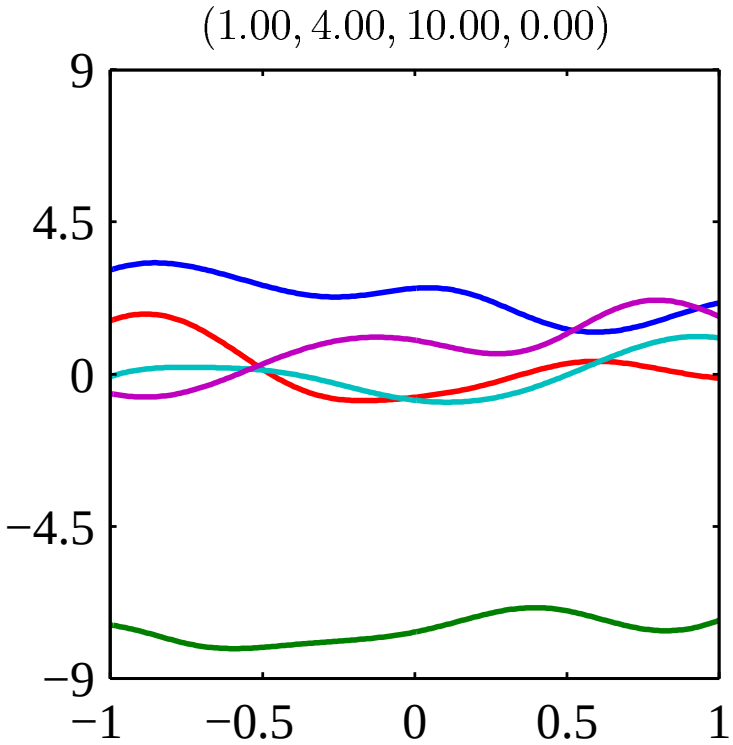

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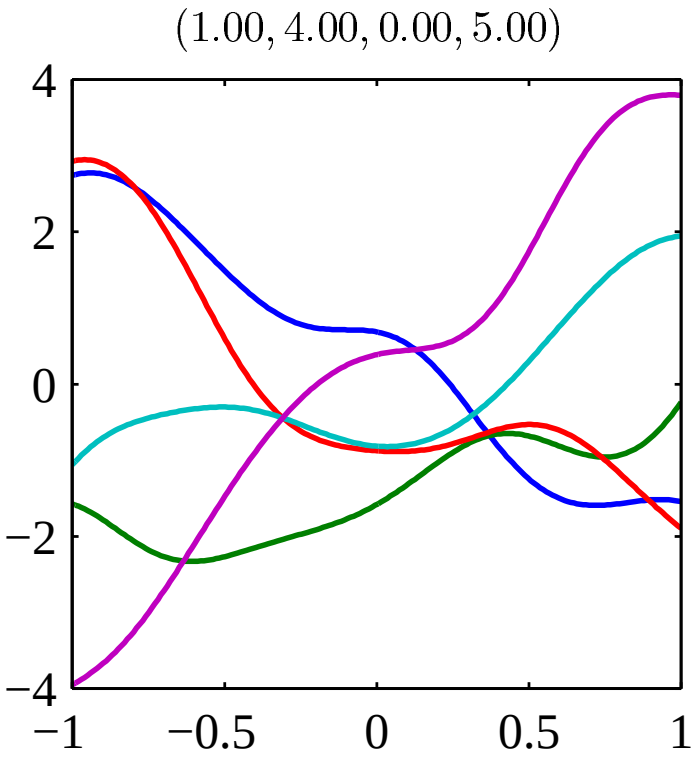

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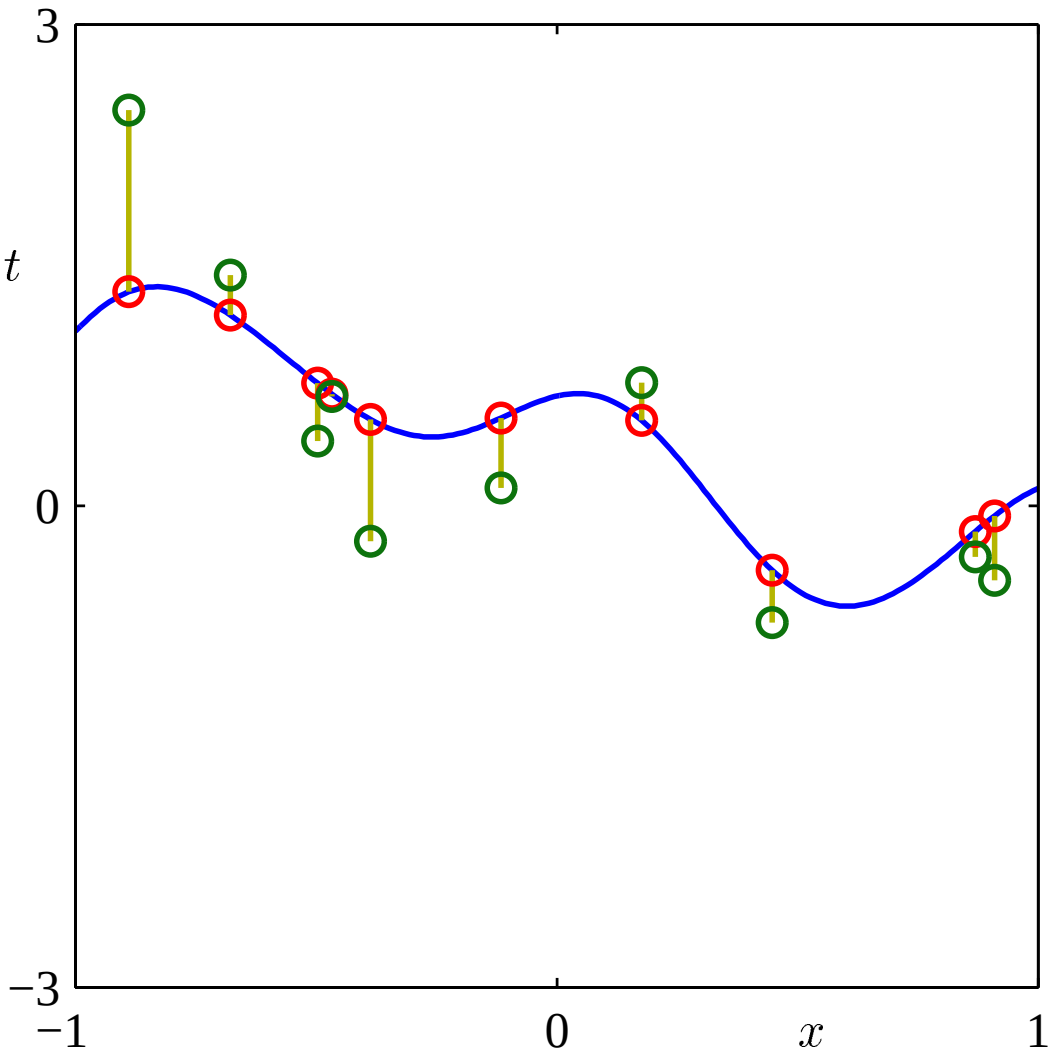


Figure: Chapter 6, Figure 6

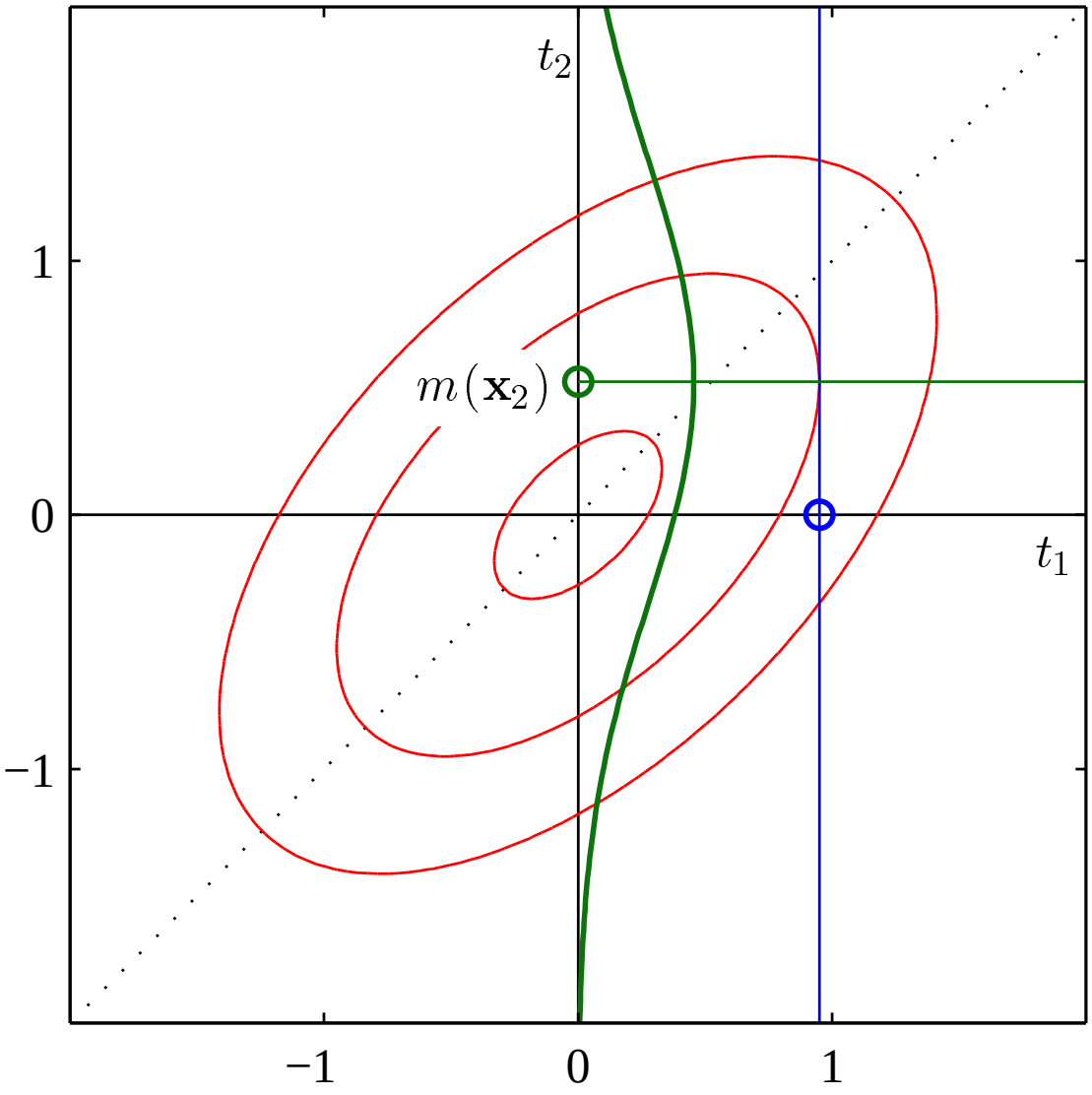
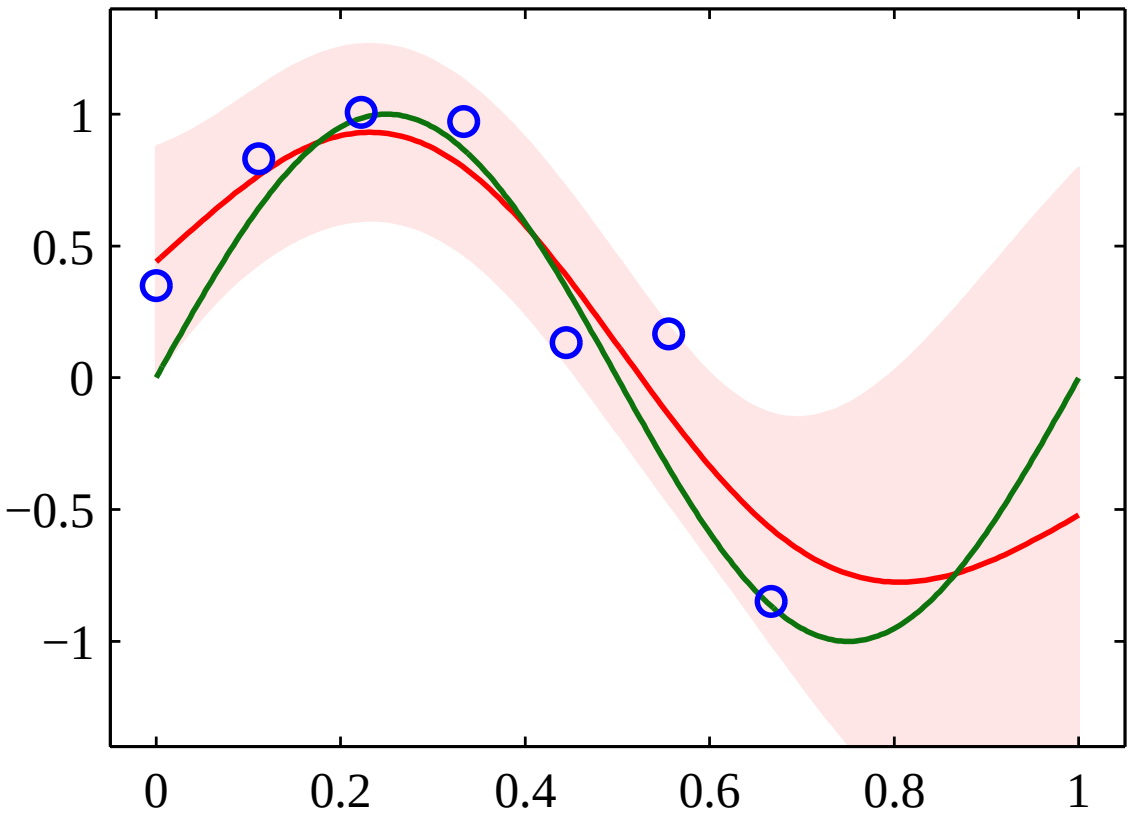


Figure: Chapter 6, Figure 7



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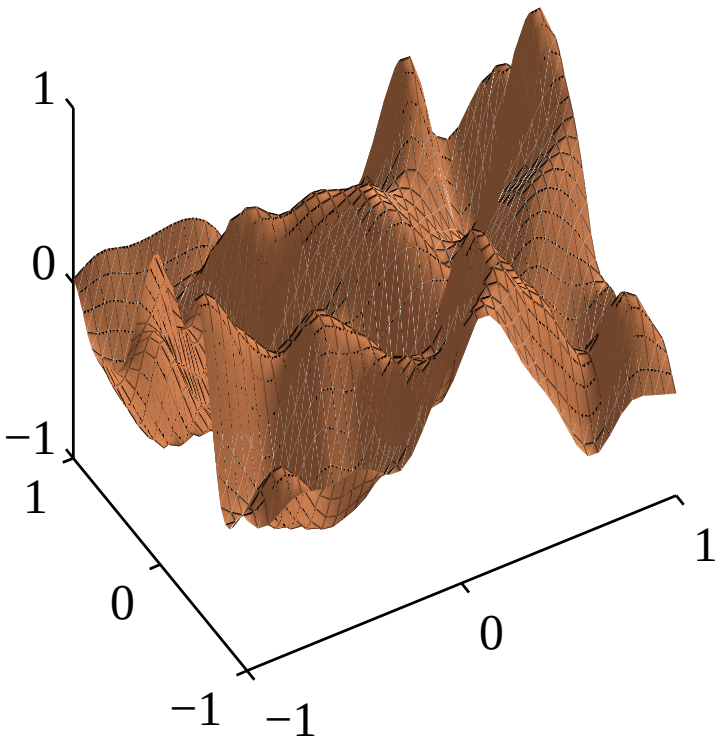

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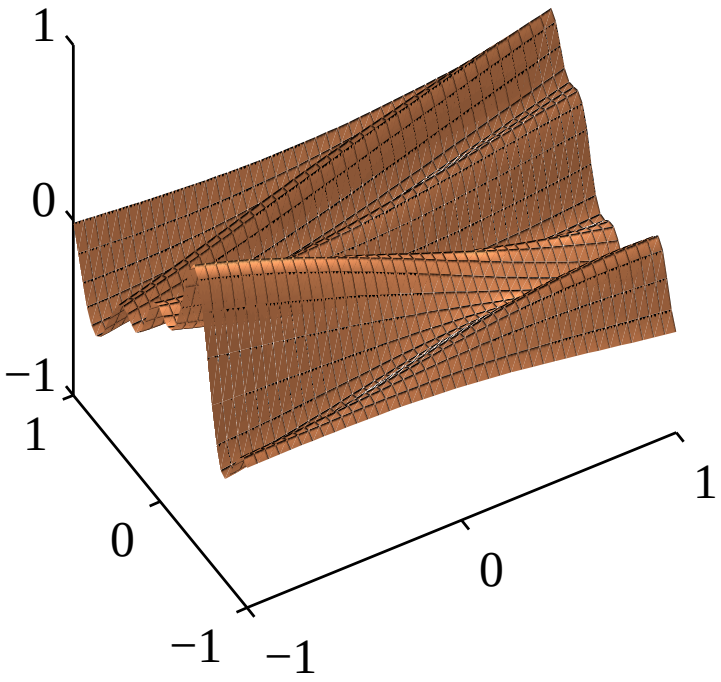

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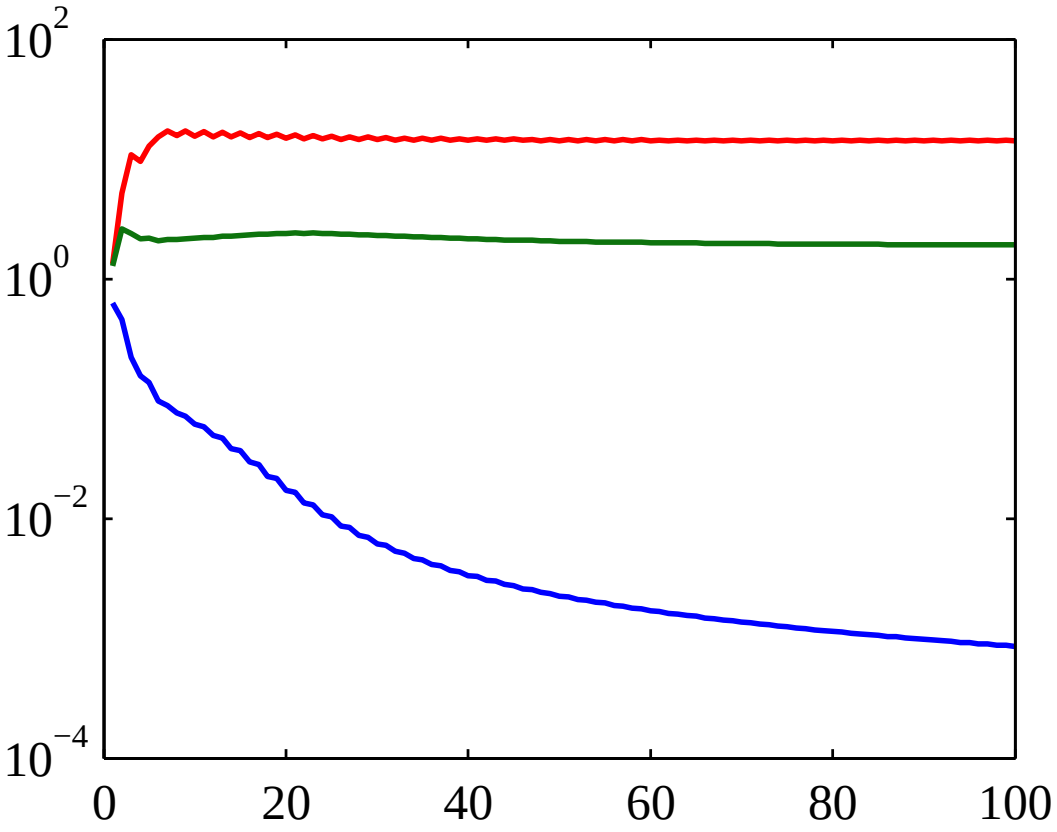

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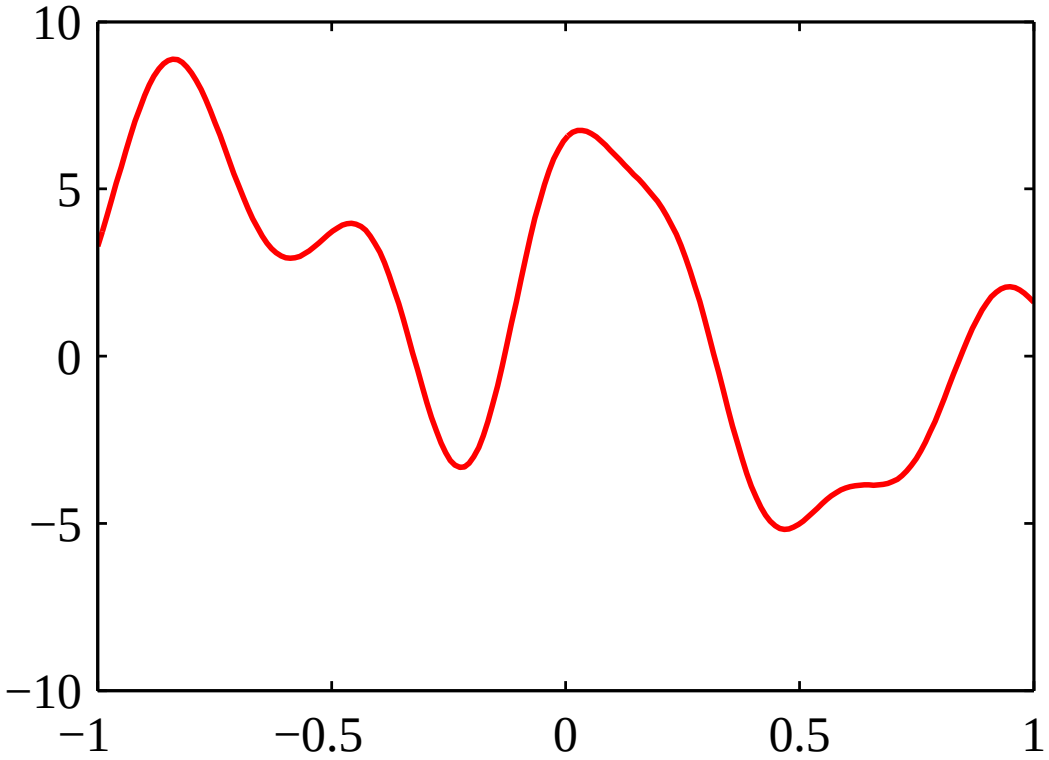

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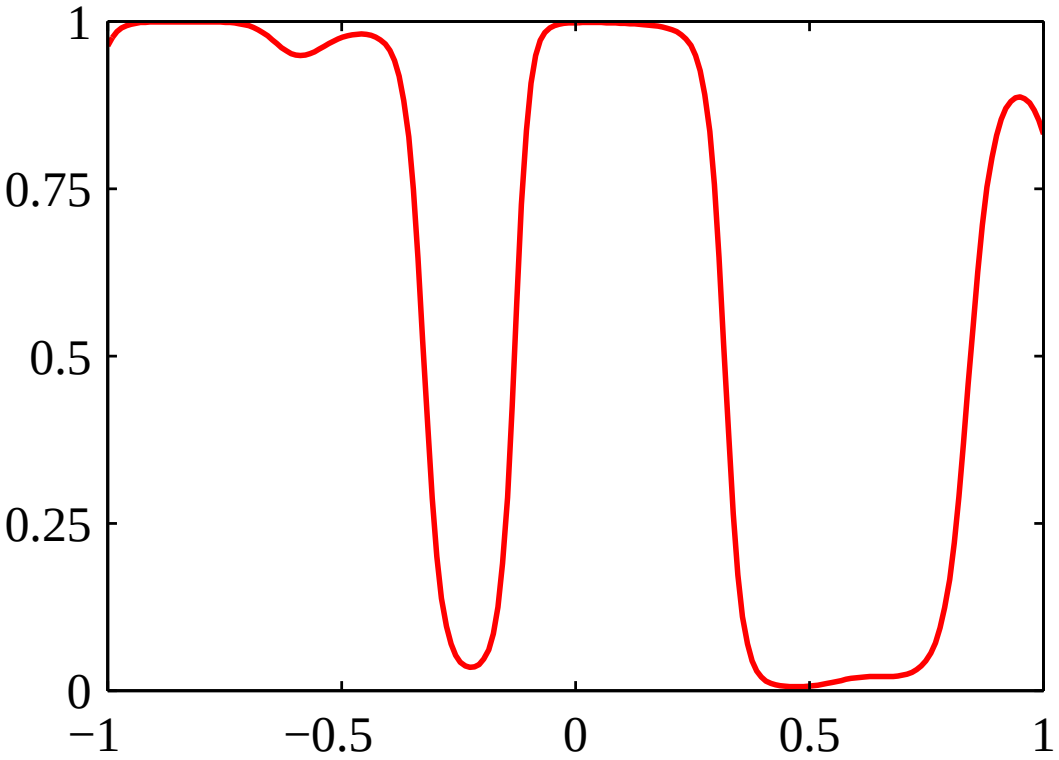

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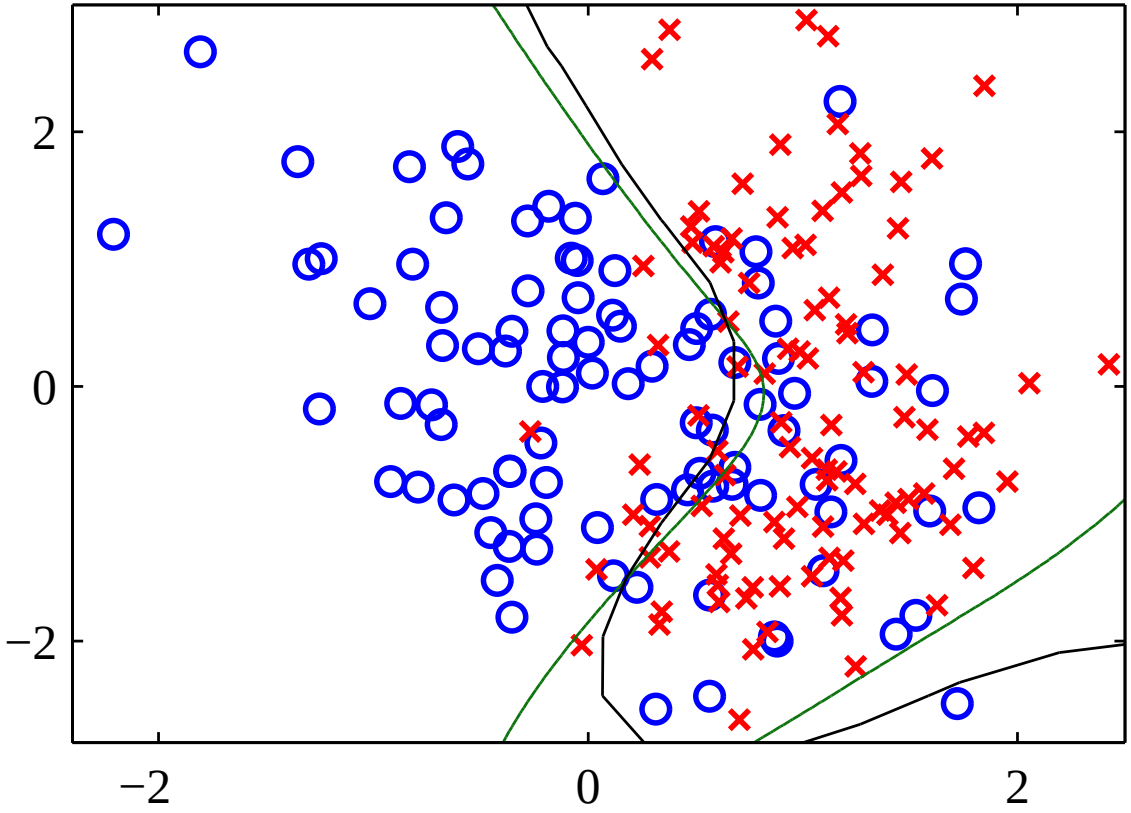

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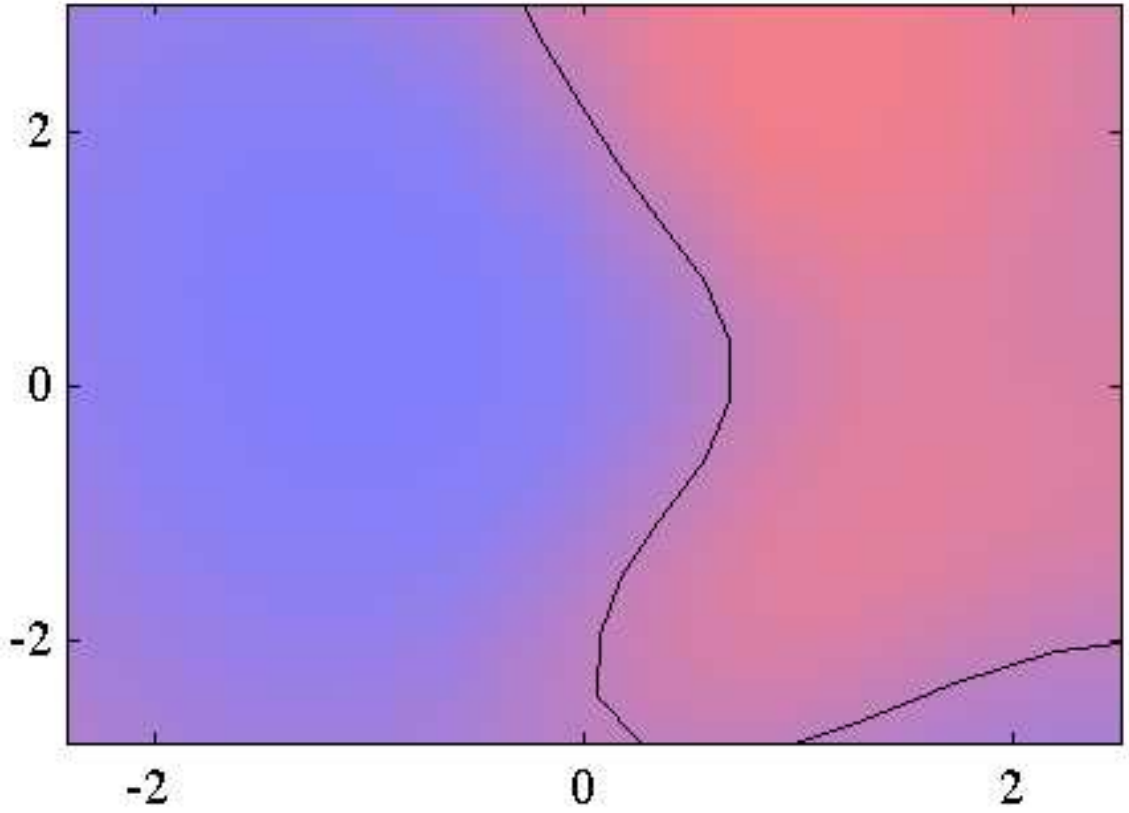

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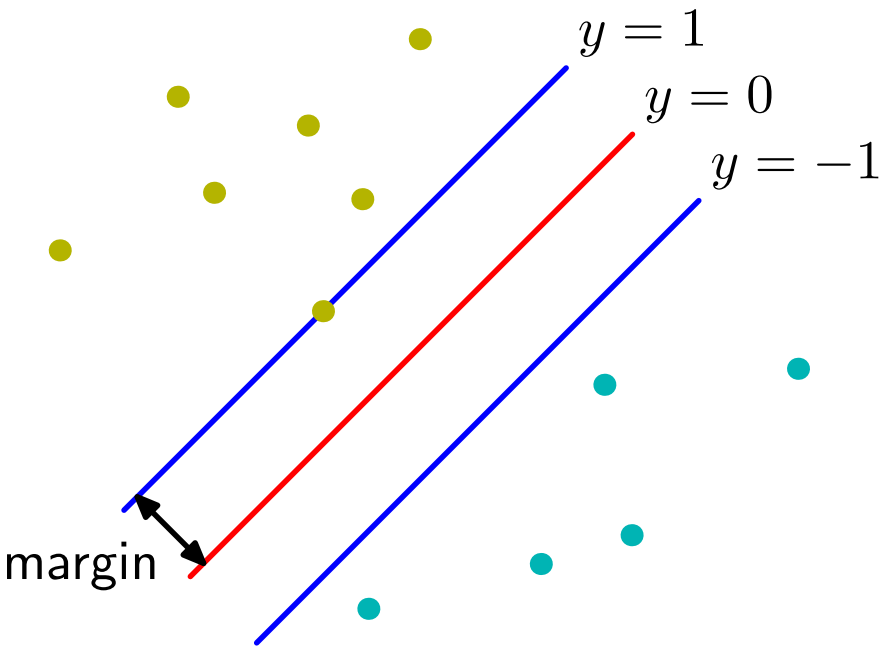

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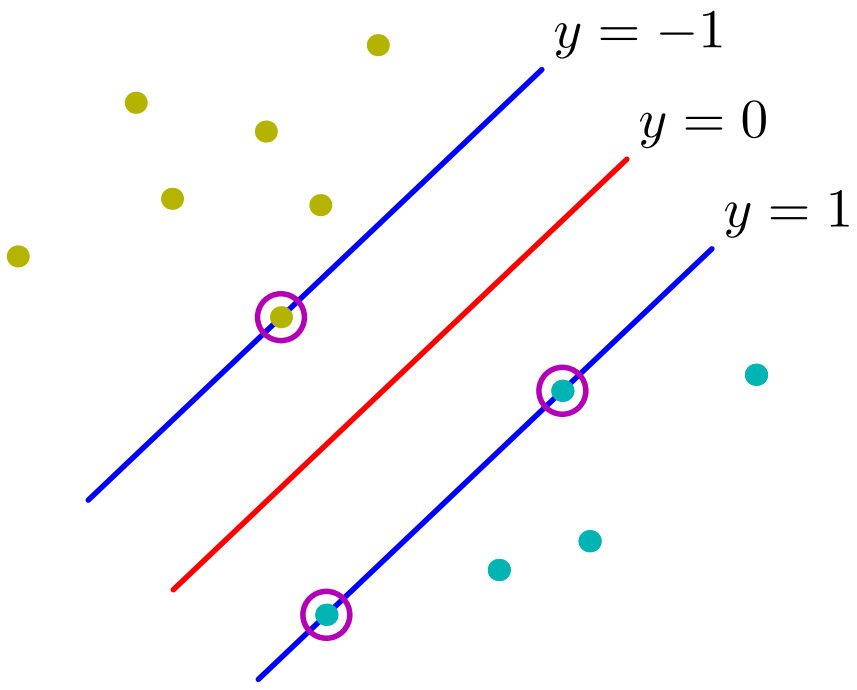

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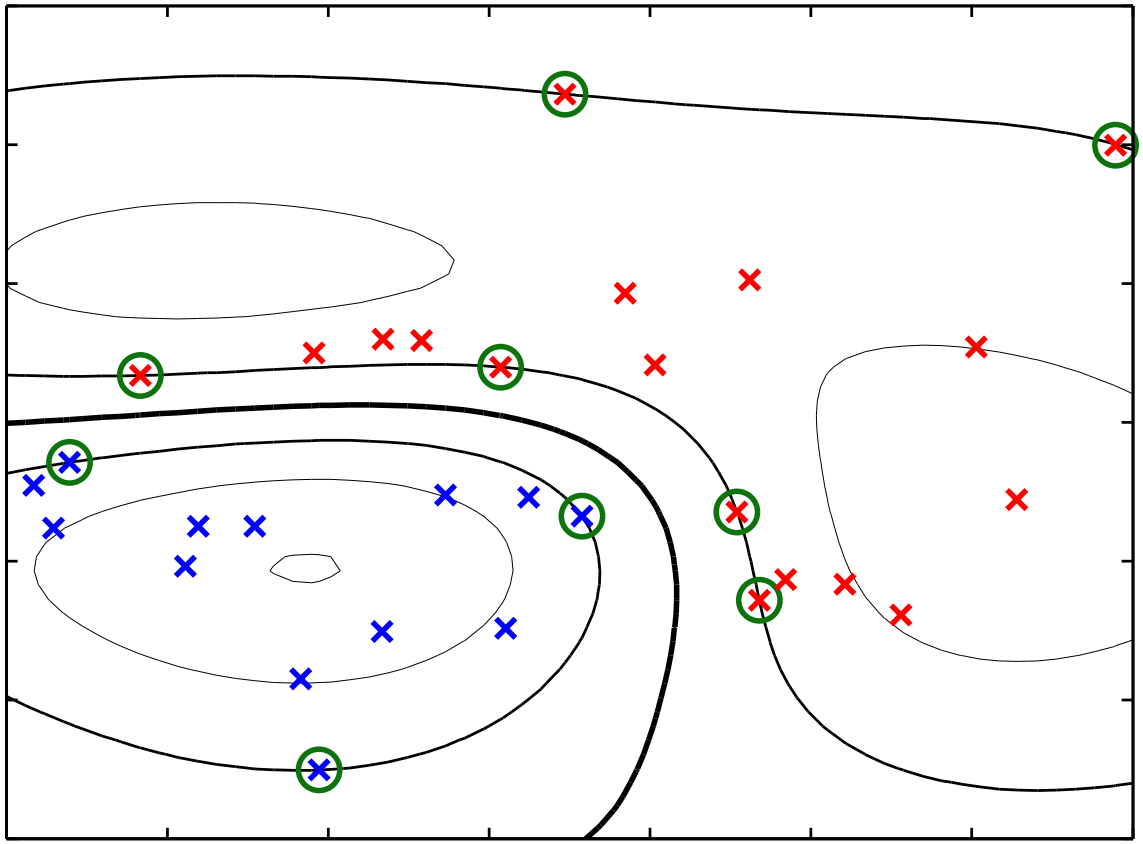

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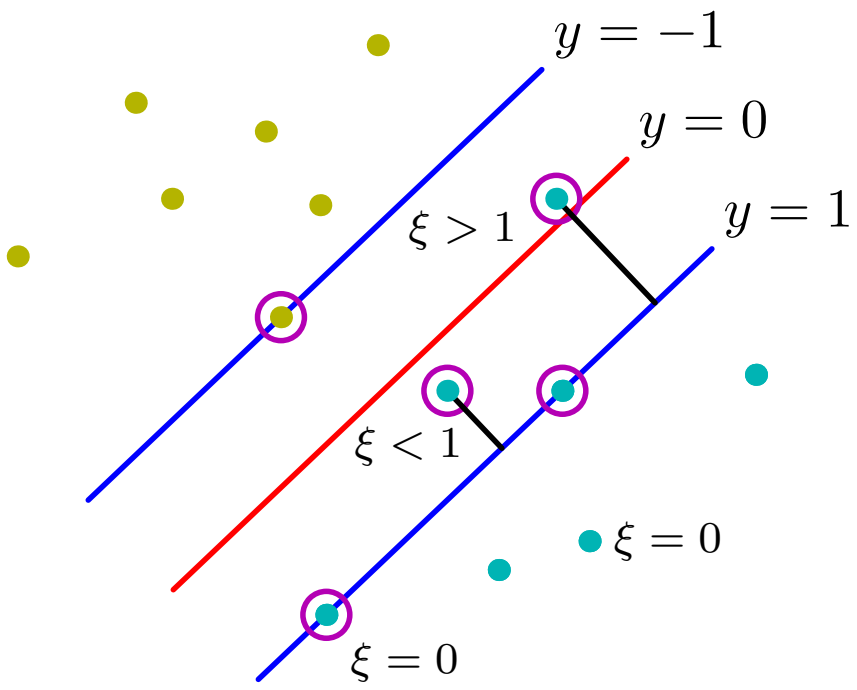

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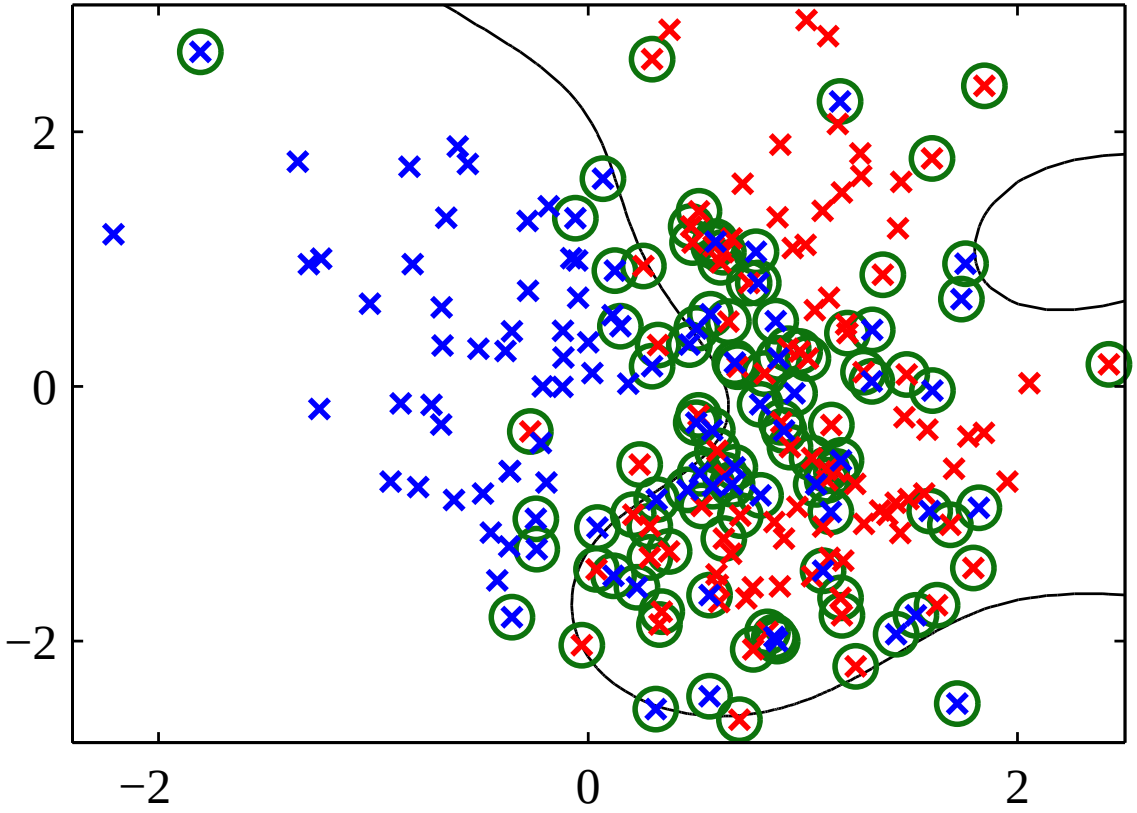

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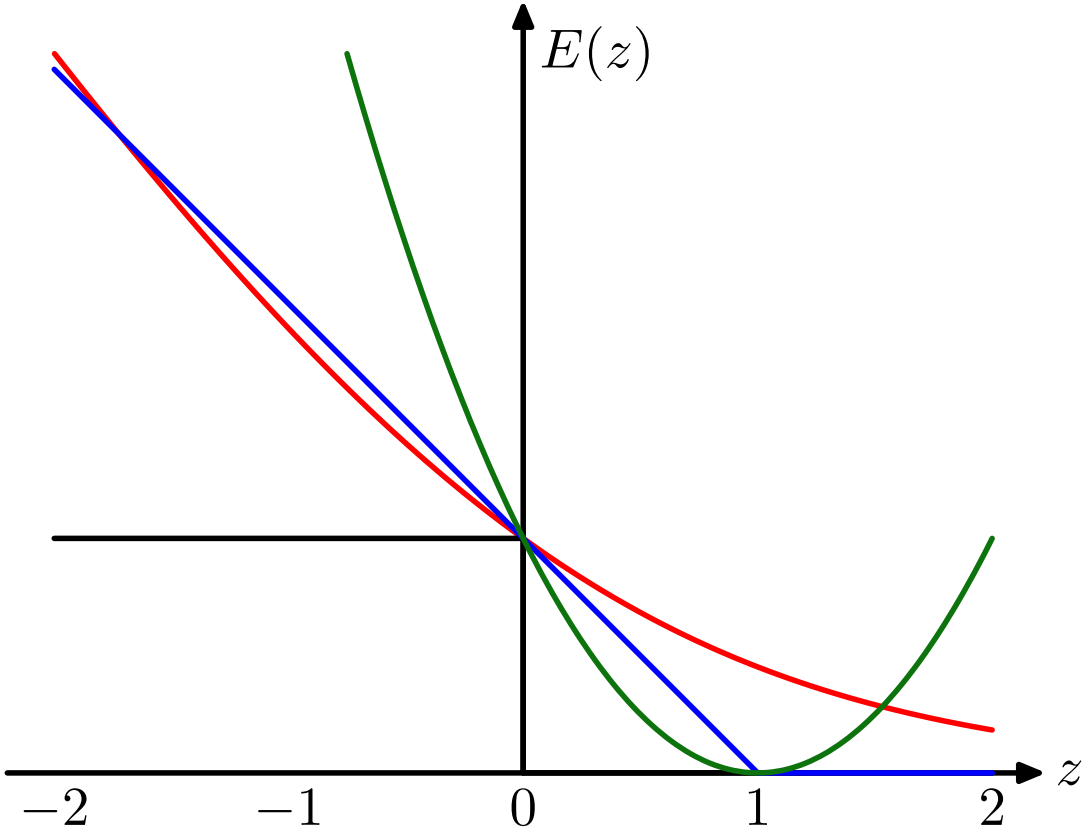

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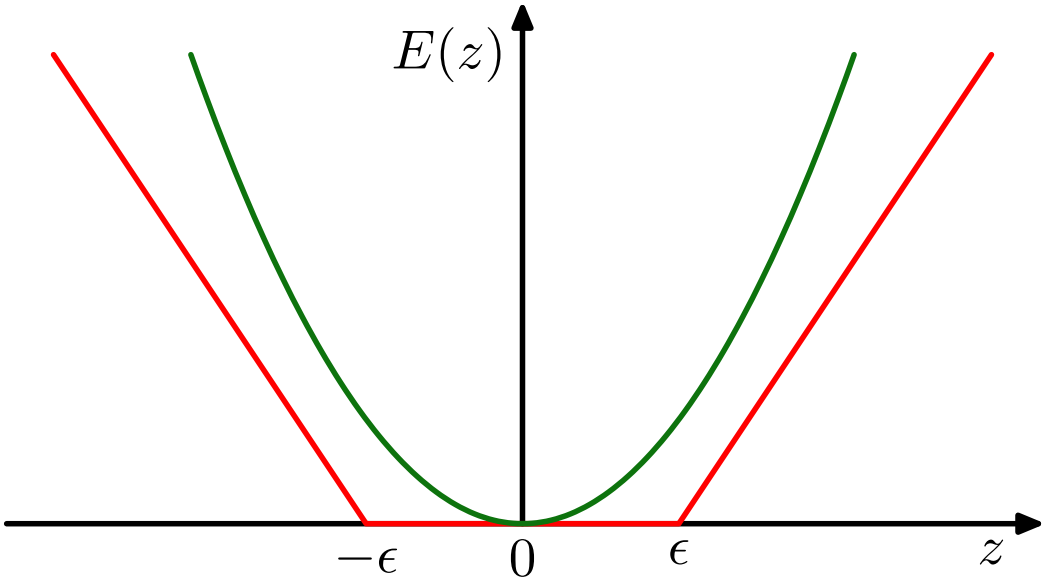

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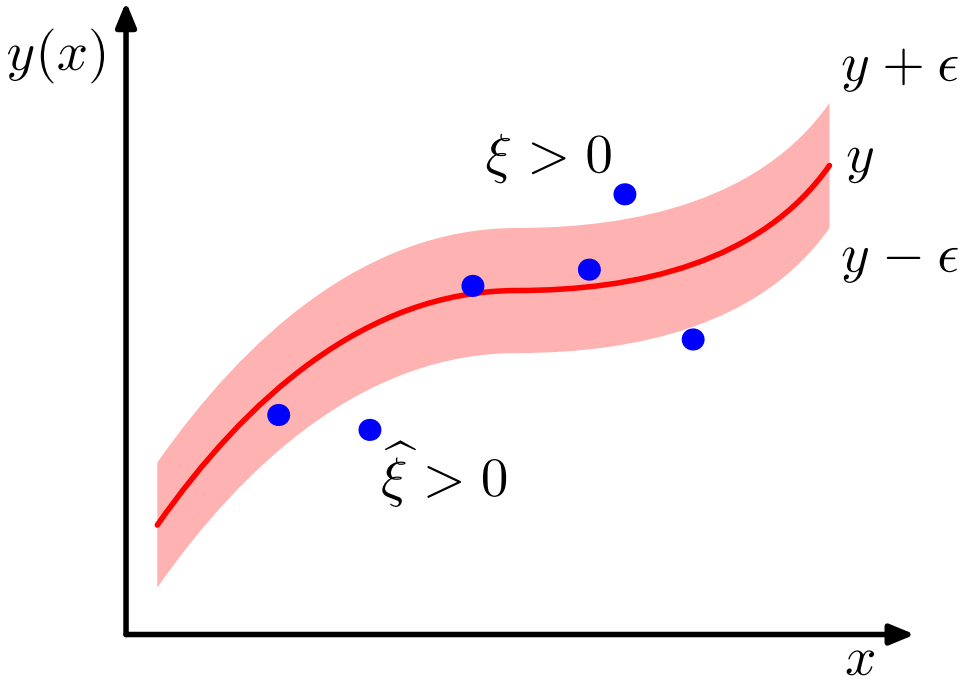

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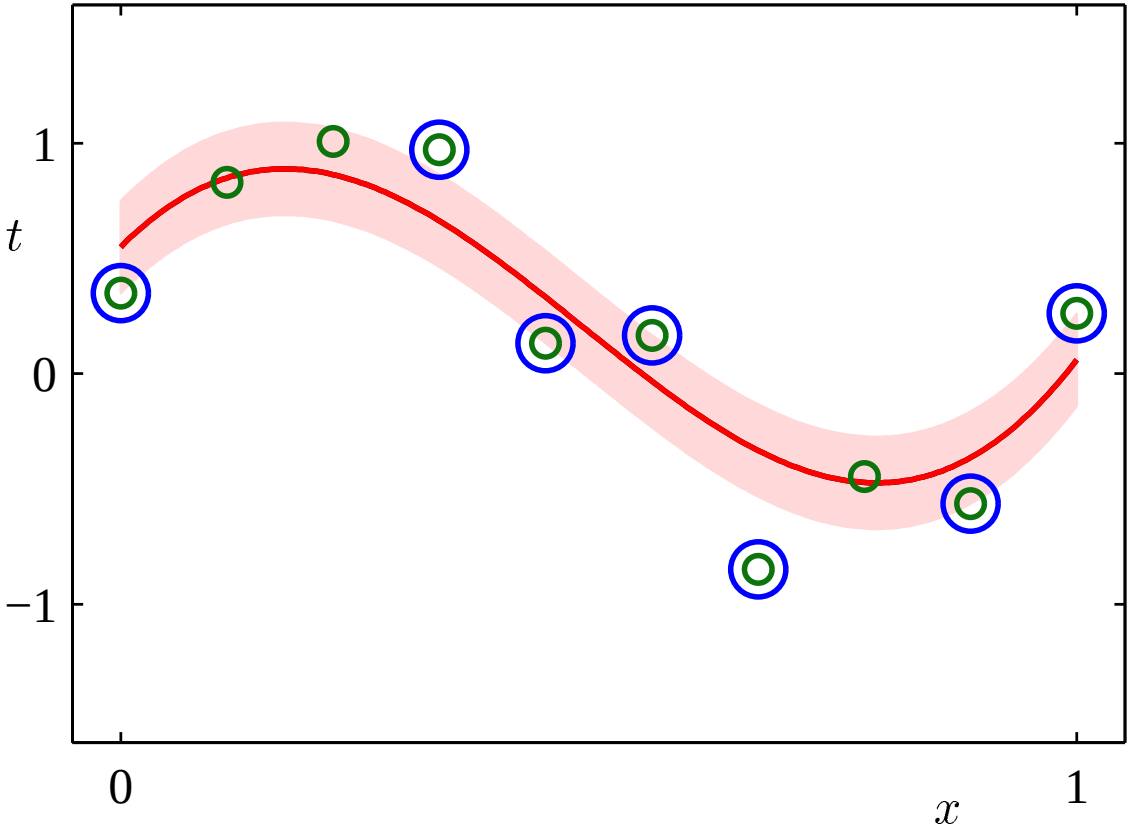

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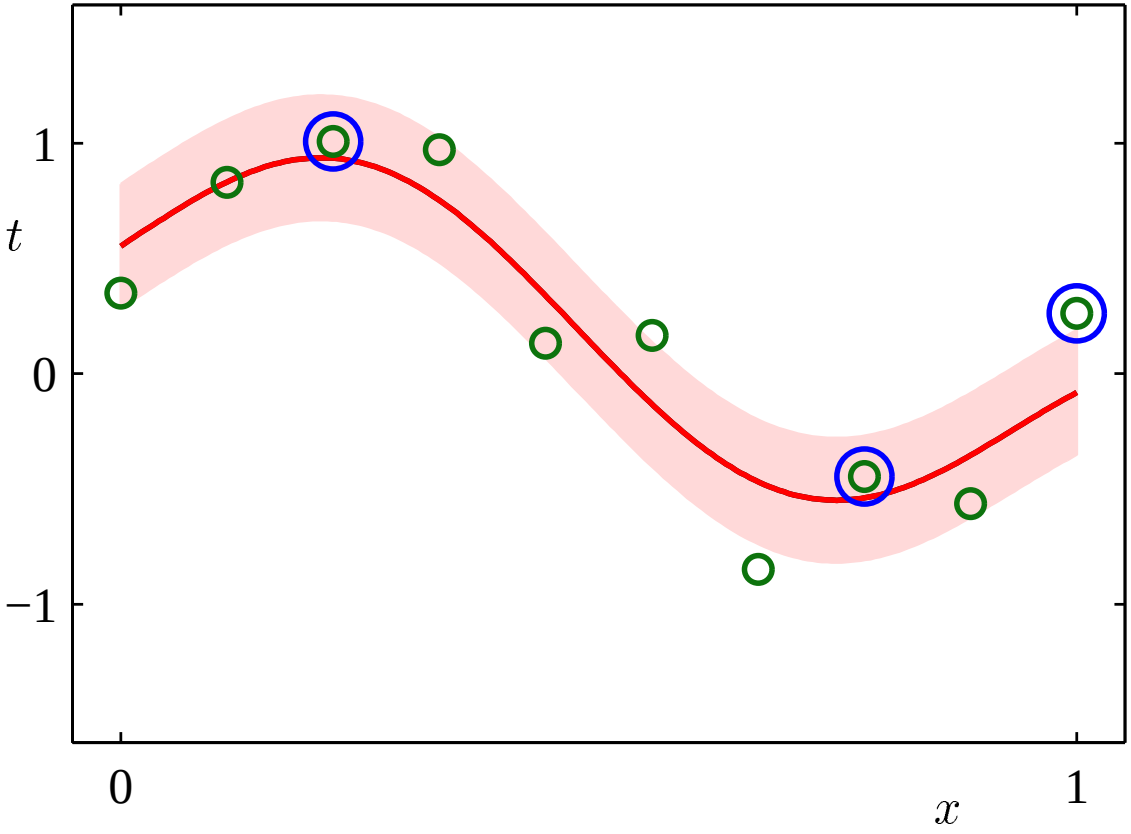

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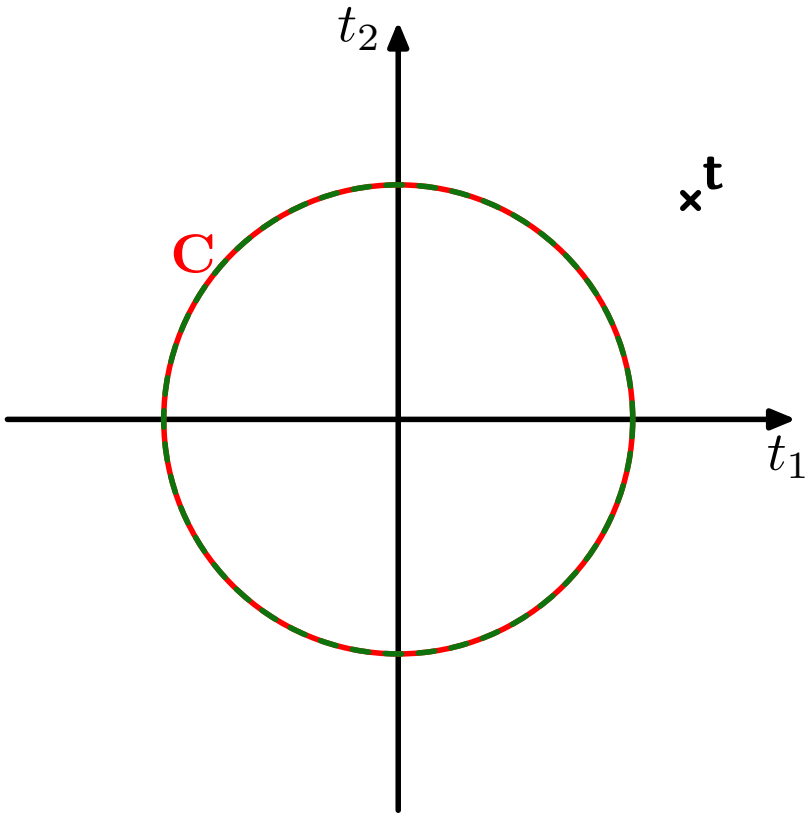

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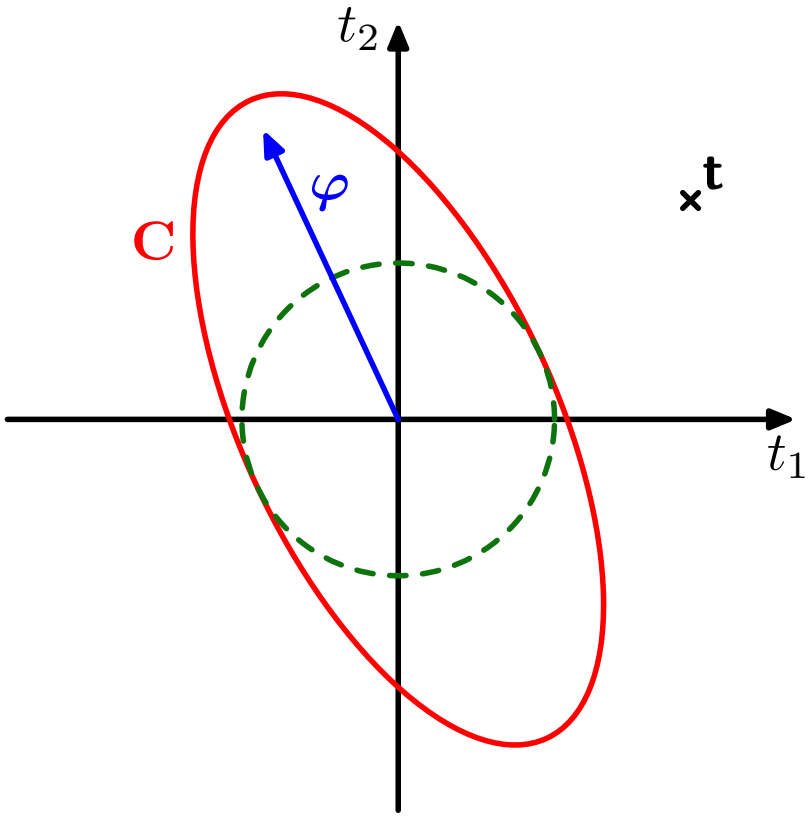

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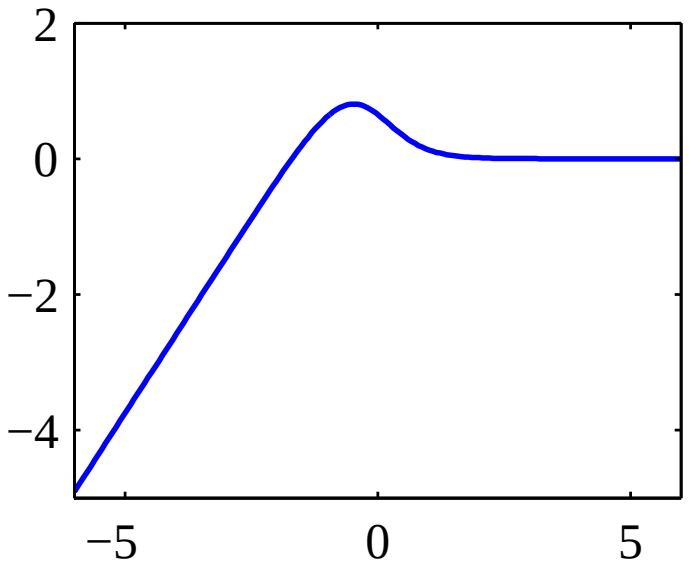

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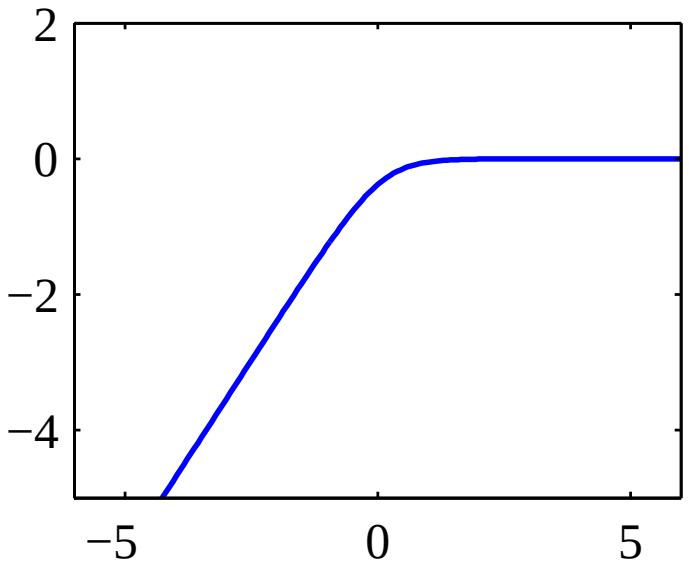

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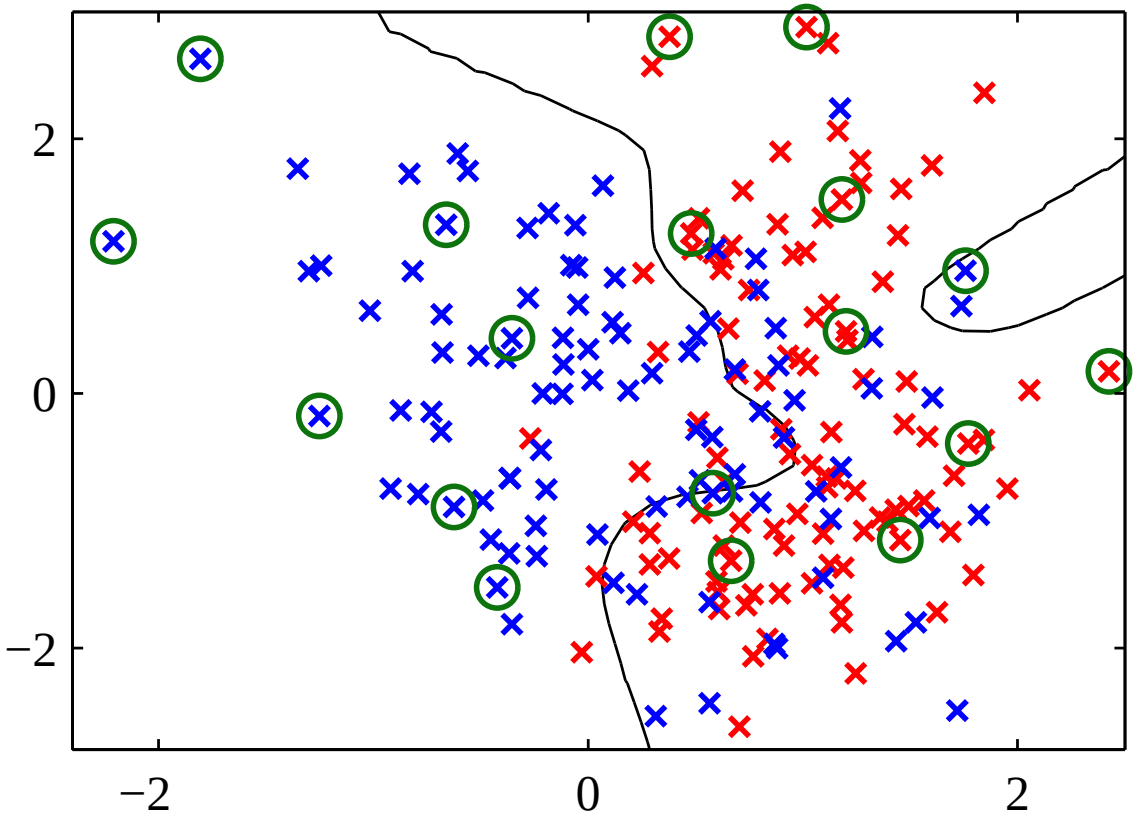

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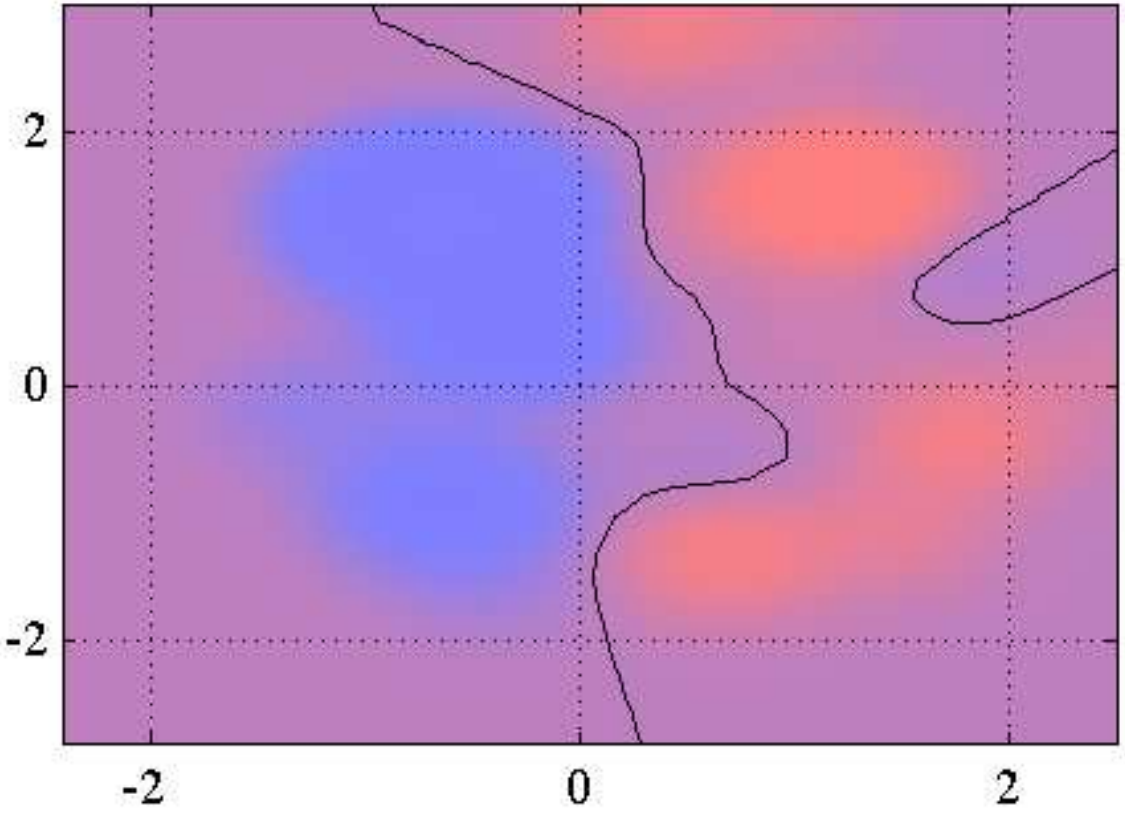

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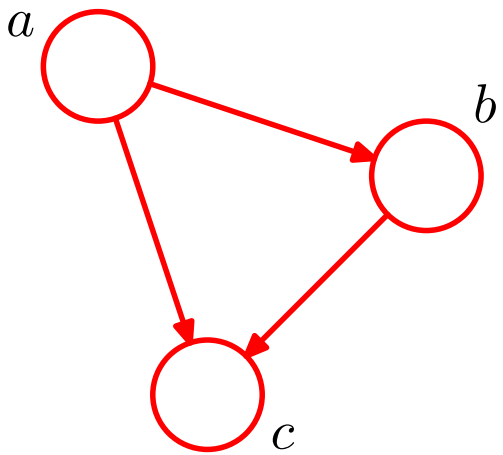

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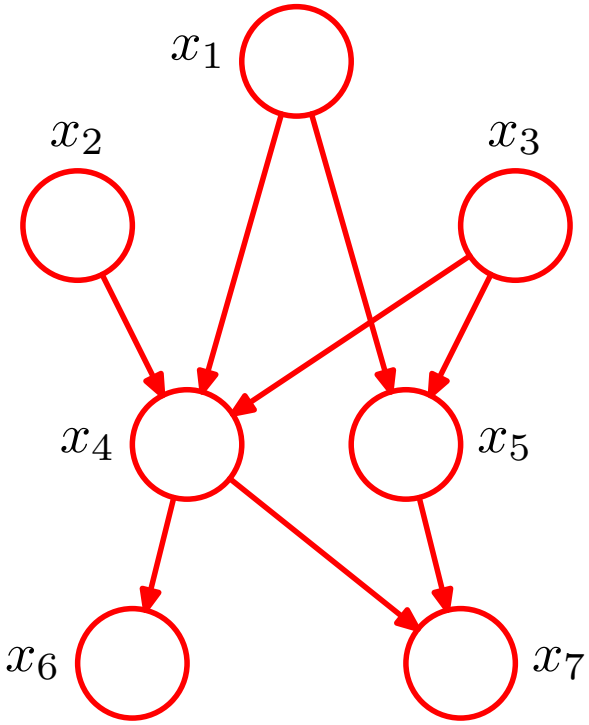

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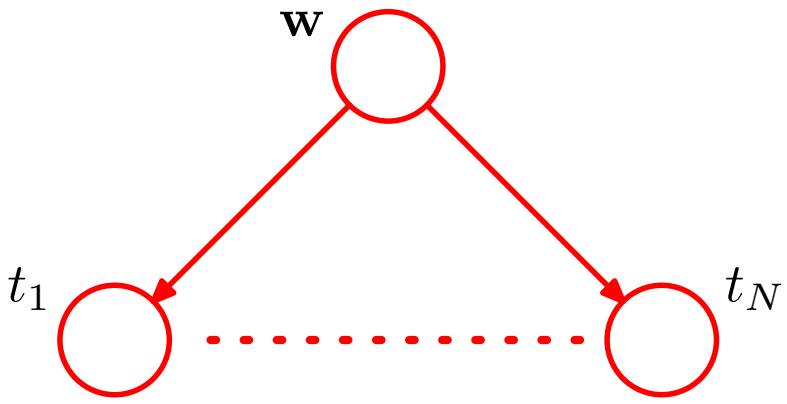

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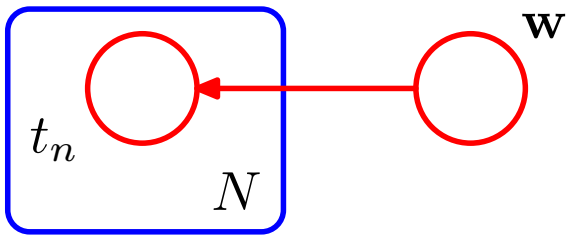

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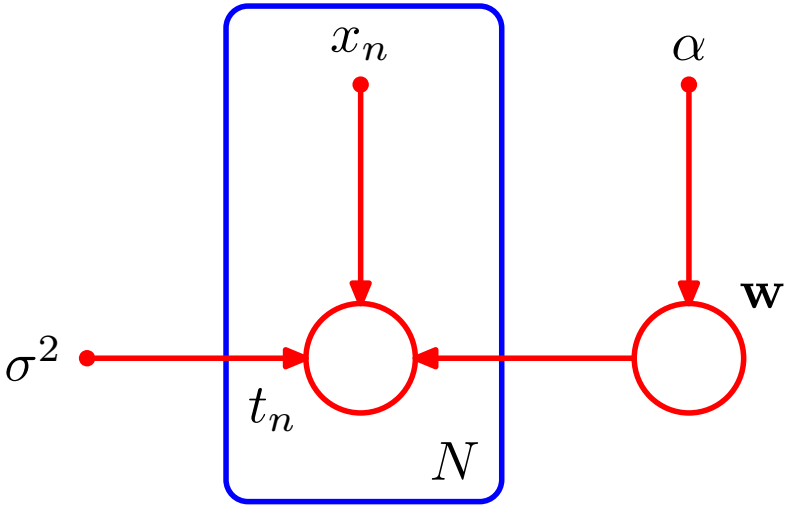

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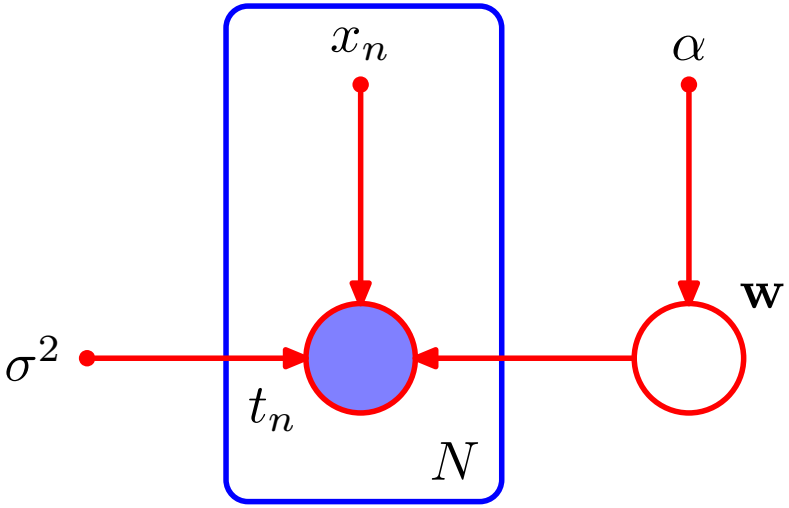

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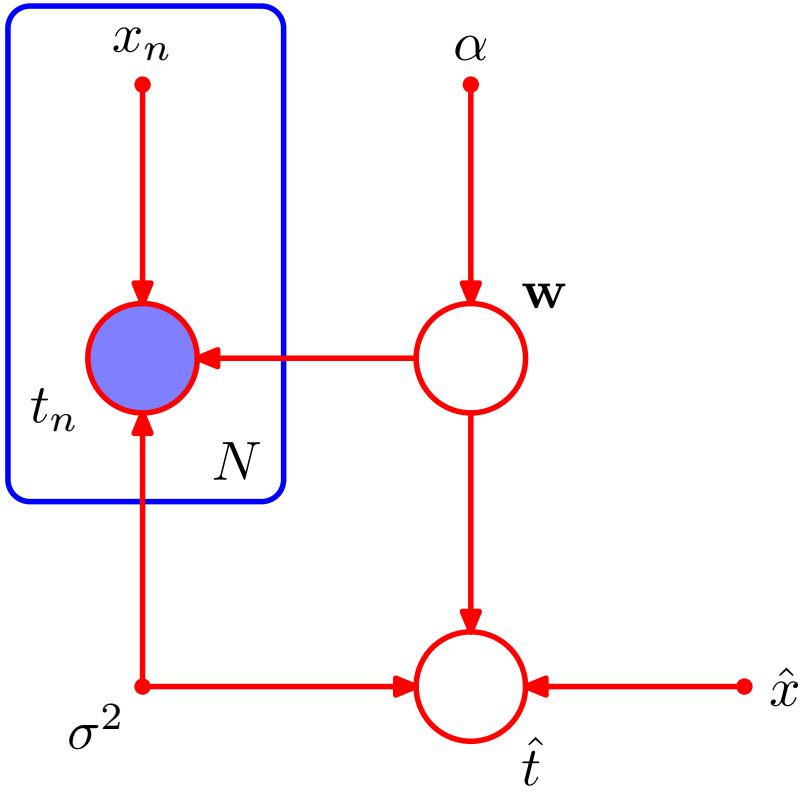

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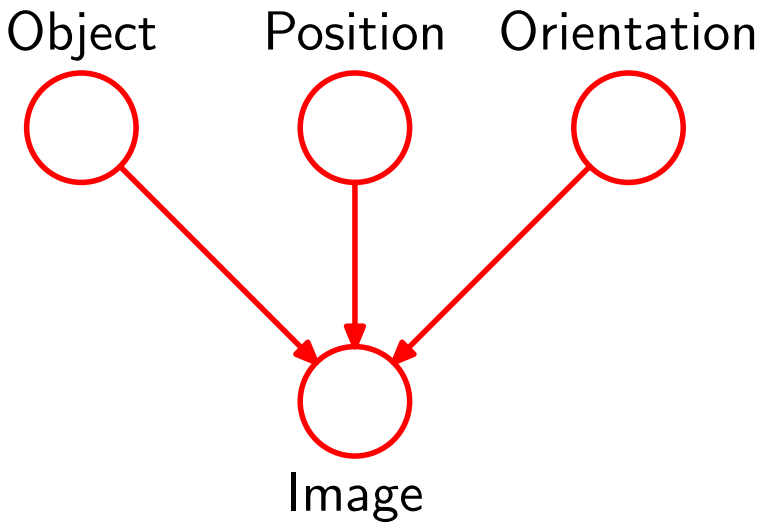
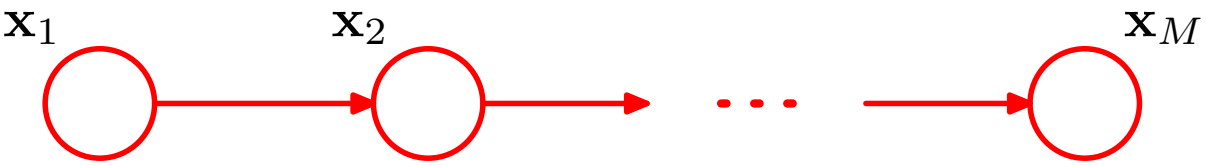


Figure: Chapter 8, Figure 8

Figure: Chapter 8, Figure 9a

Figure: Chapter 8, Figure 9b



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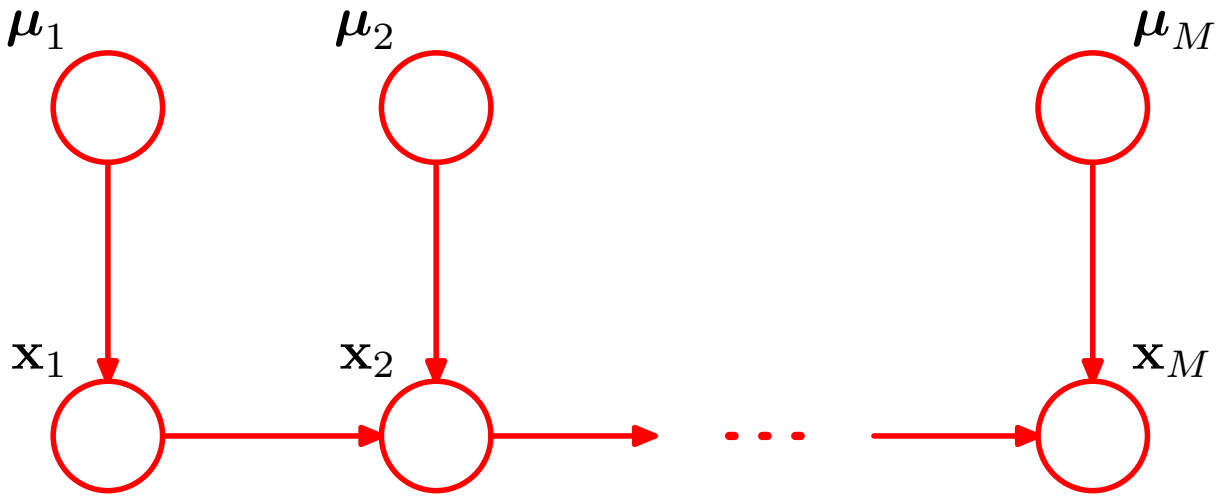

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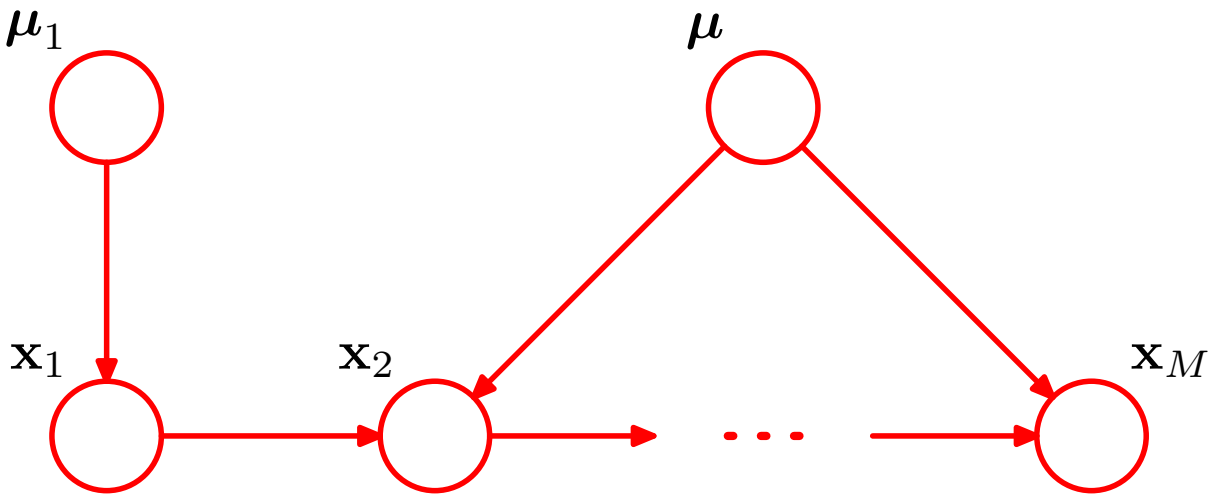

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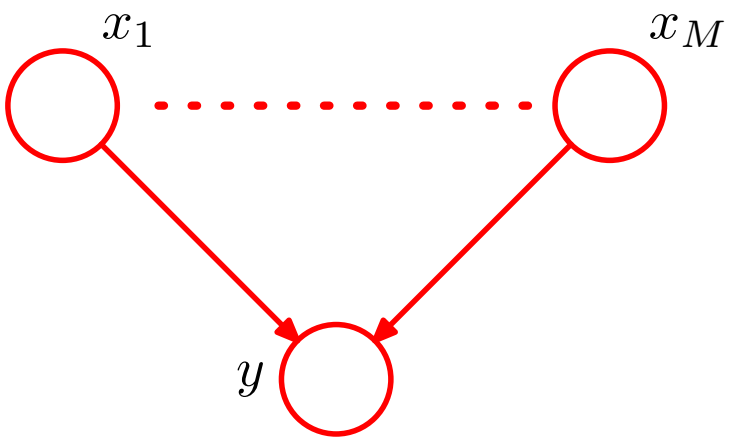

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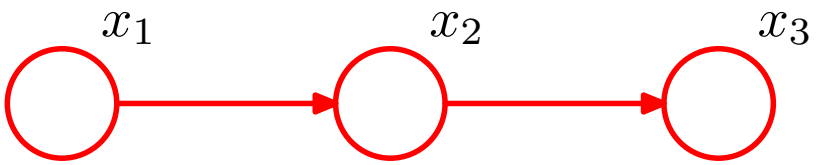

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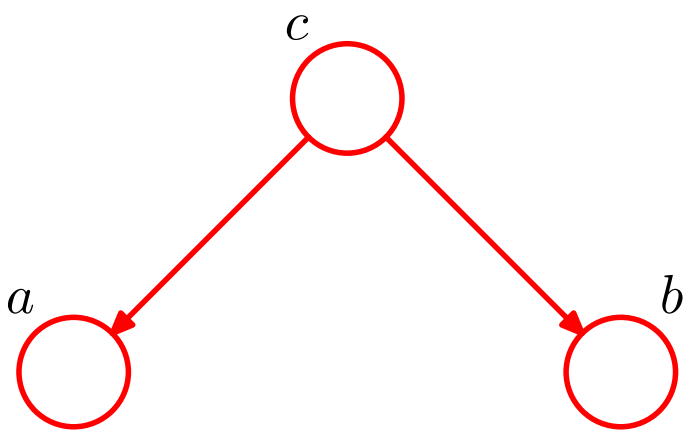

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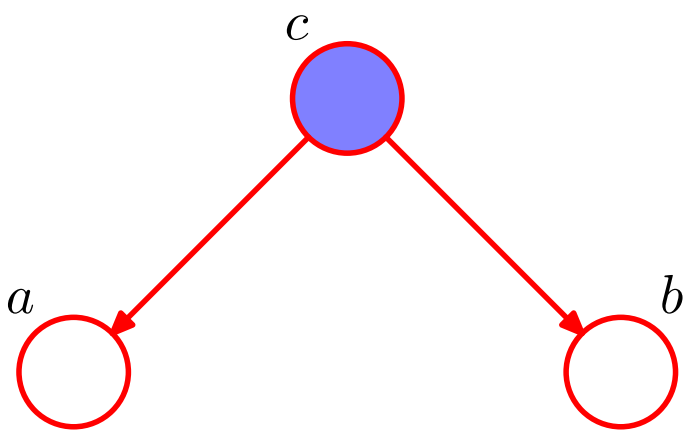

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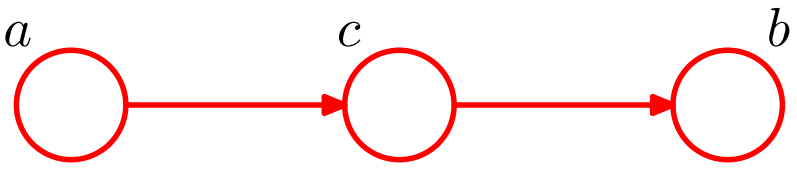

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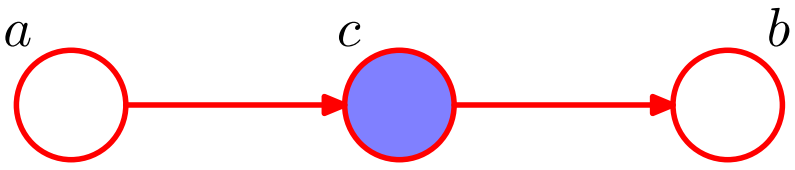

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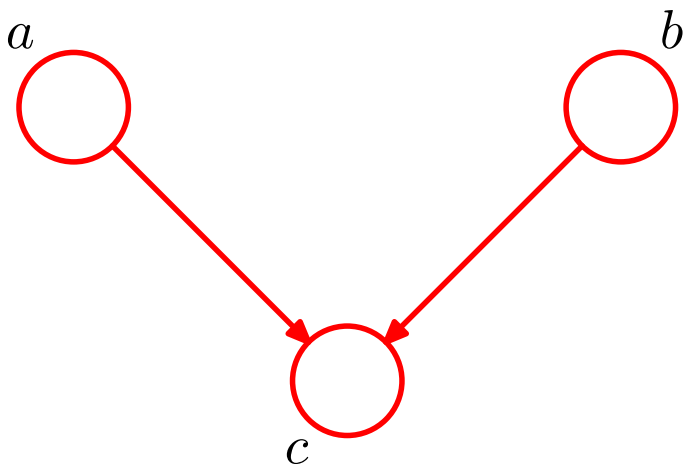

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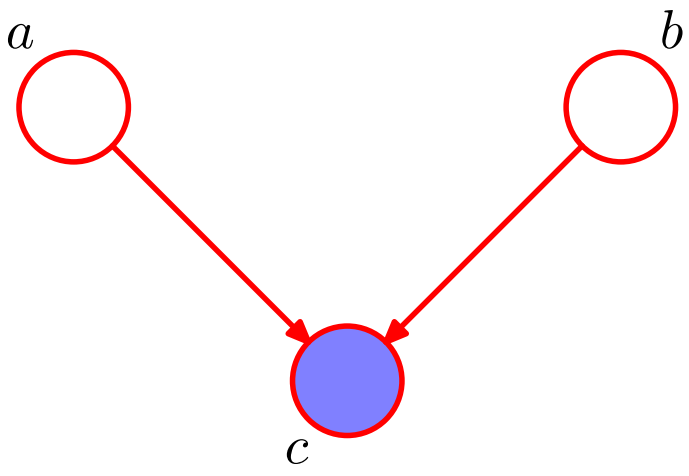

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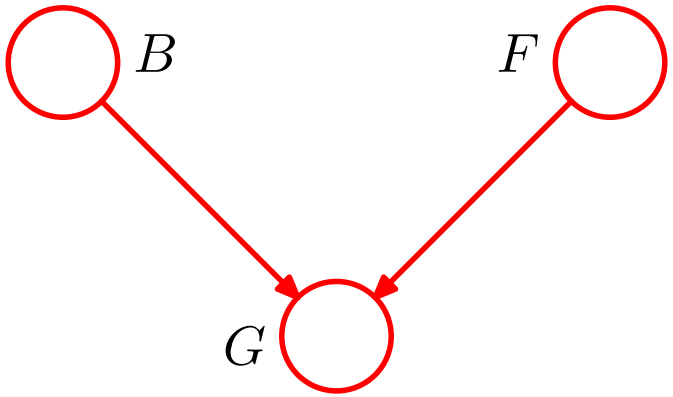

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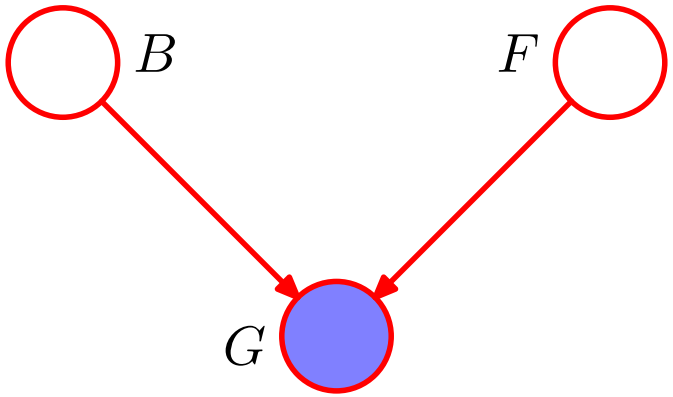

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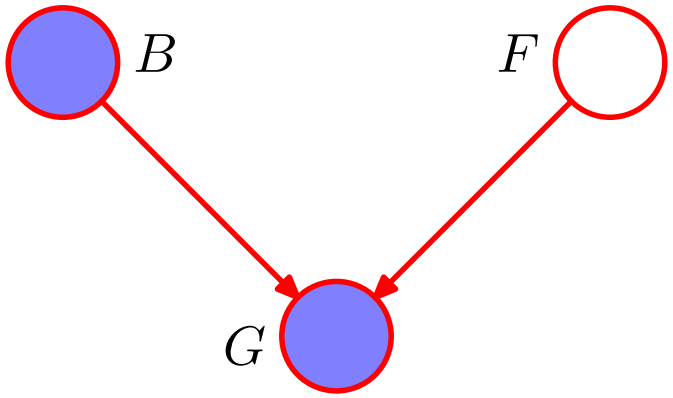

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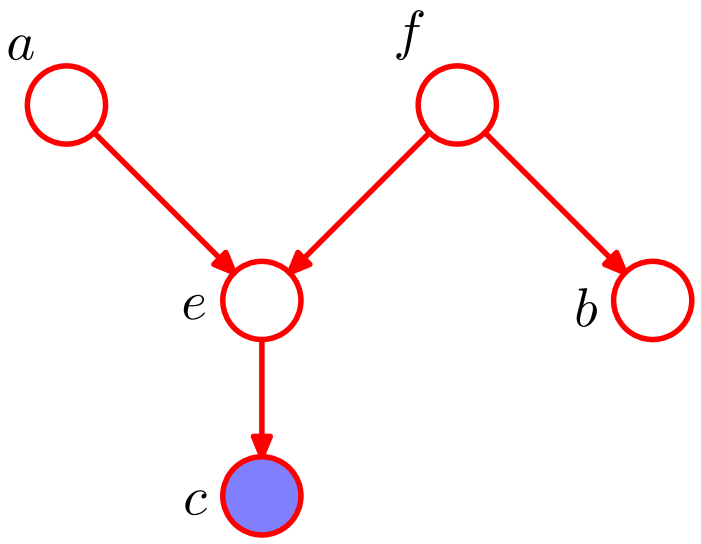

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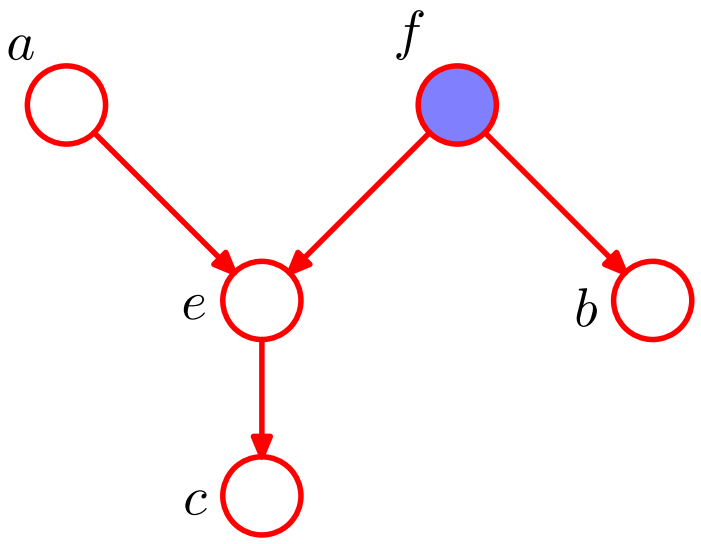

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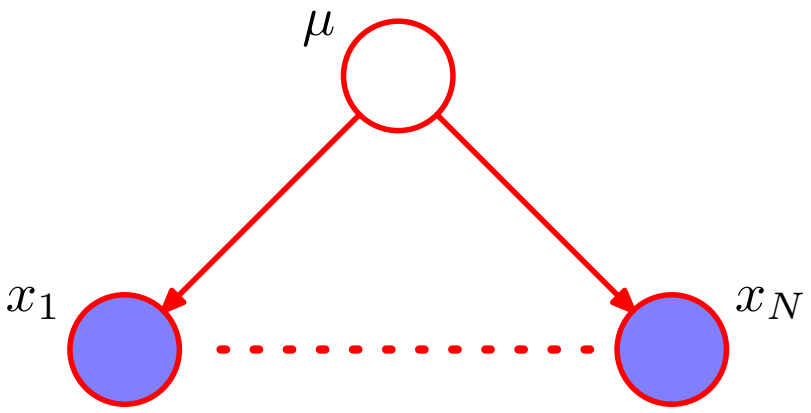

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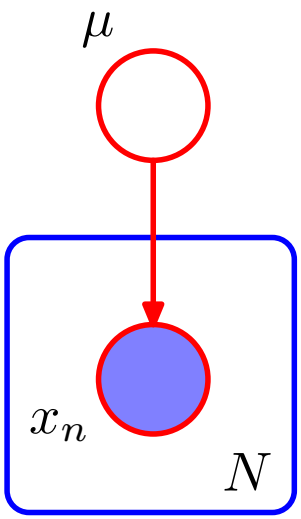

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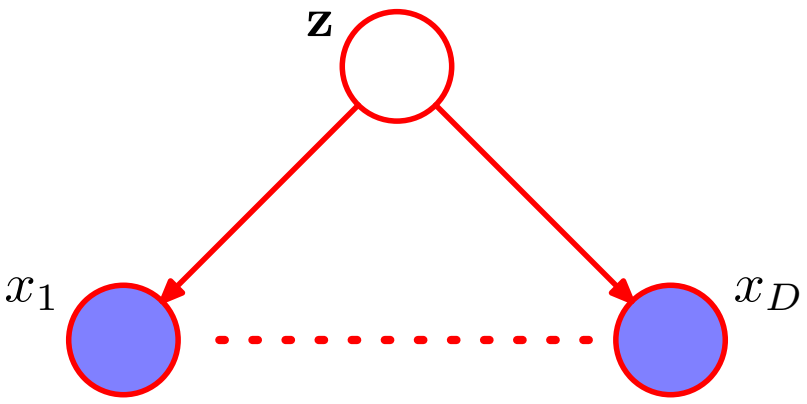

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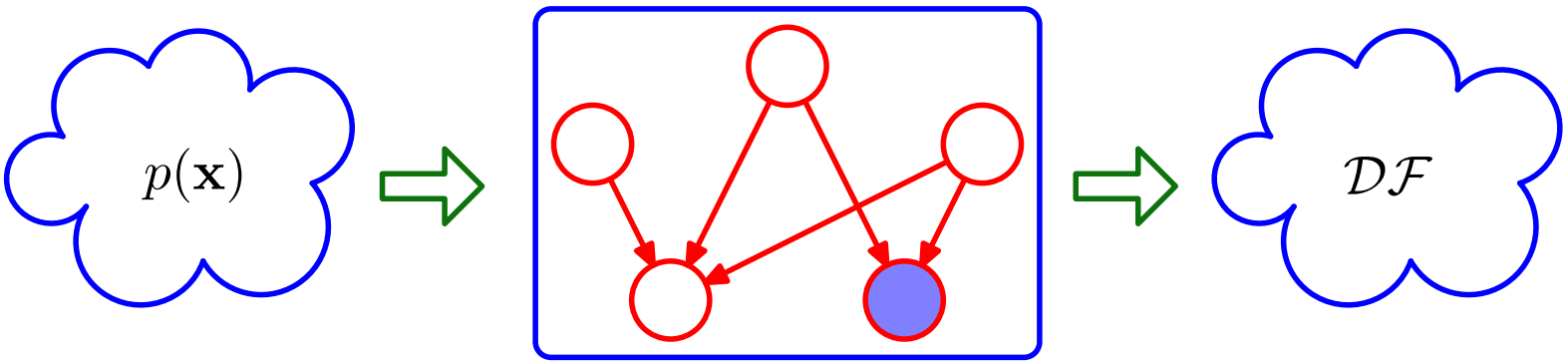

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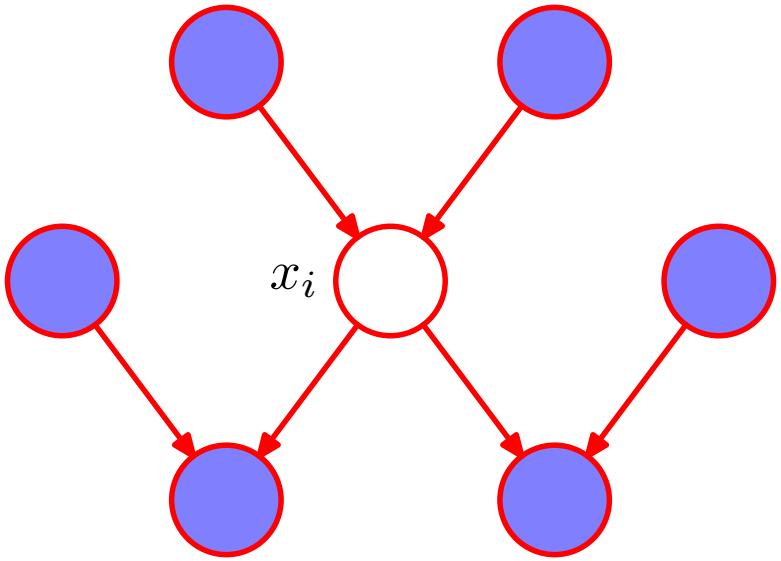


Figure: Chapter 8, Figure 26

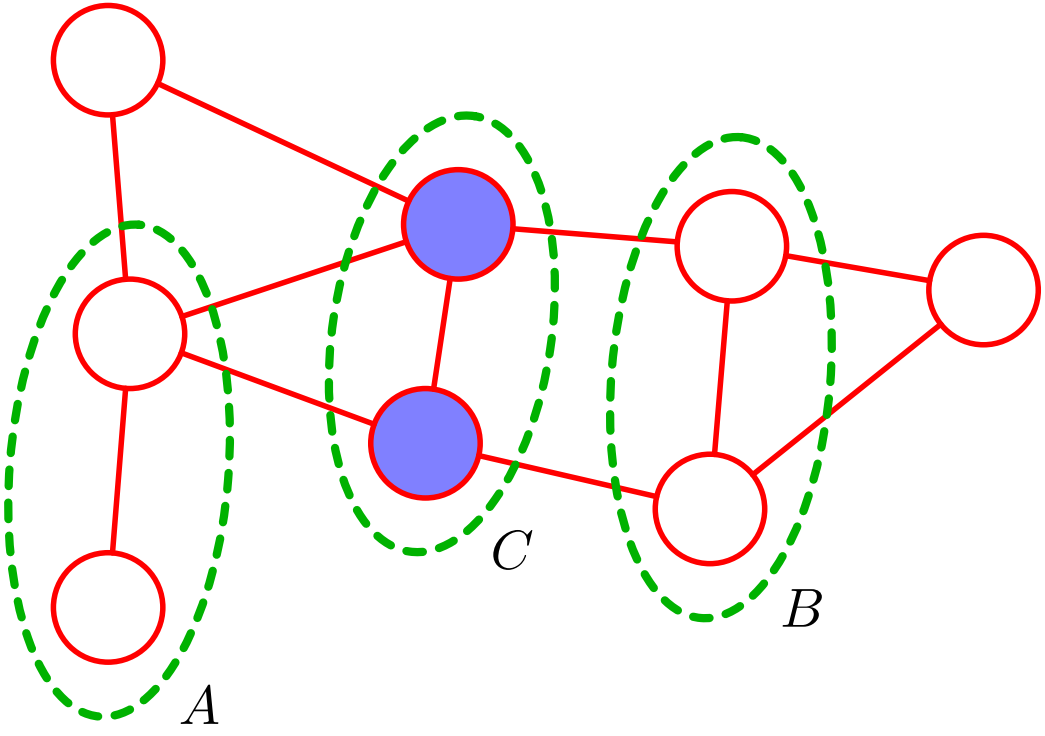
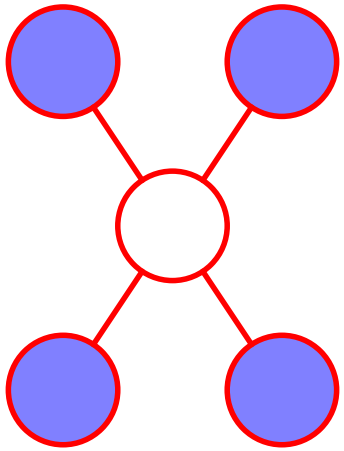


Figure: Chapter 8, Figure 27



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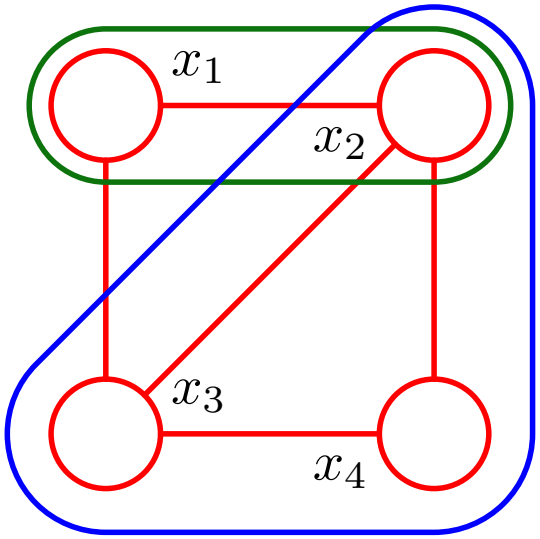


Figure: Chapter 8, Figure 29

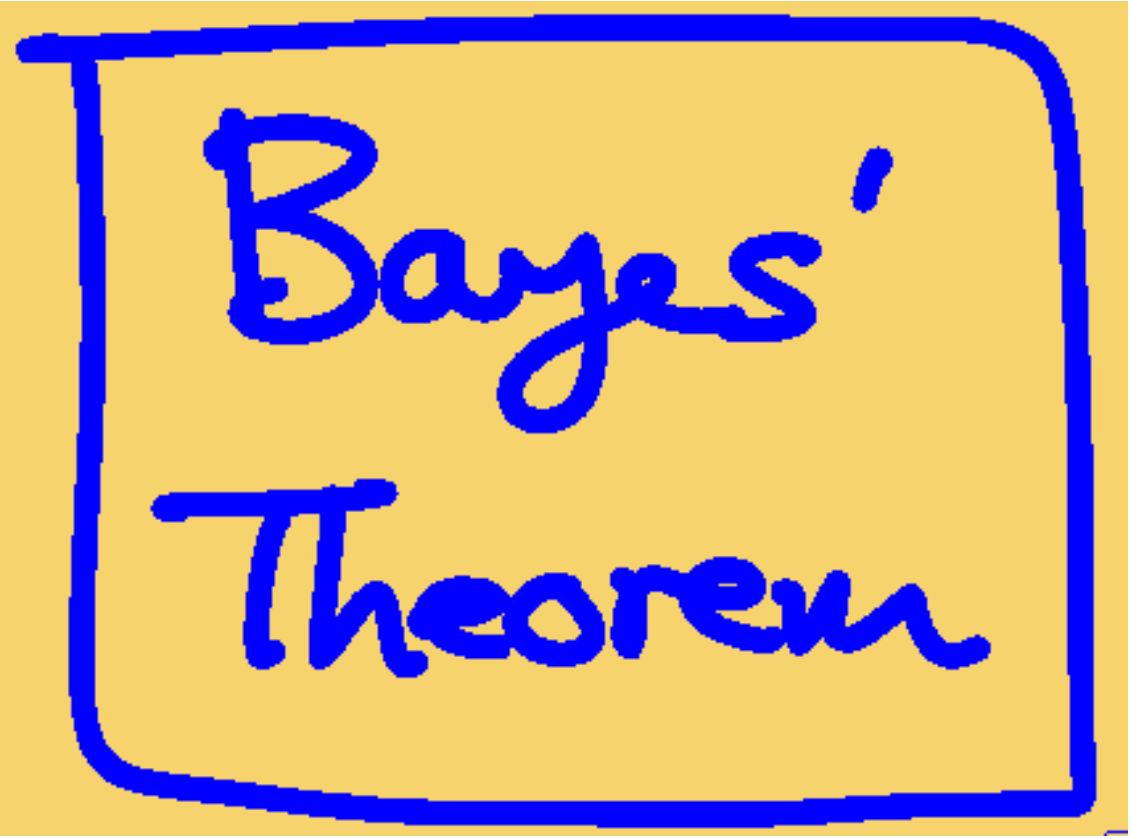


Figure: Chapter 8, Figure 30a

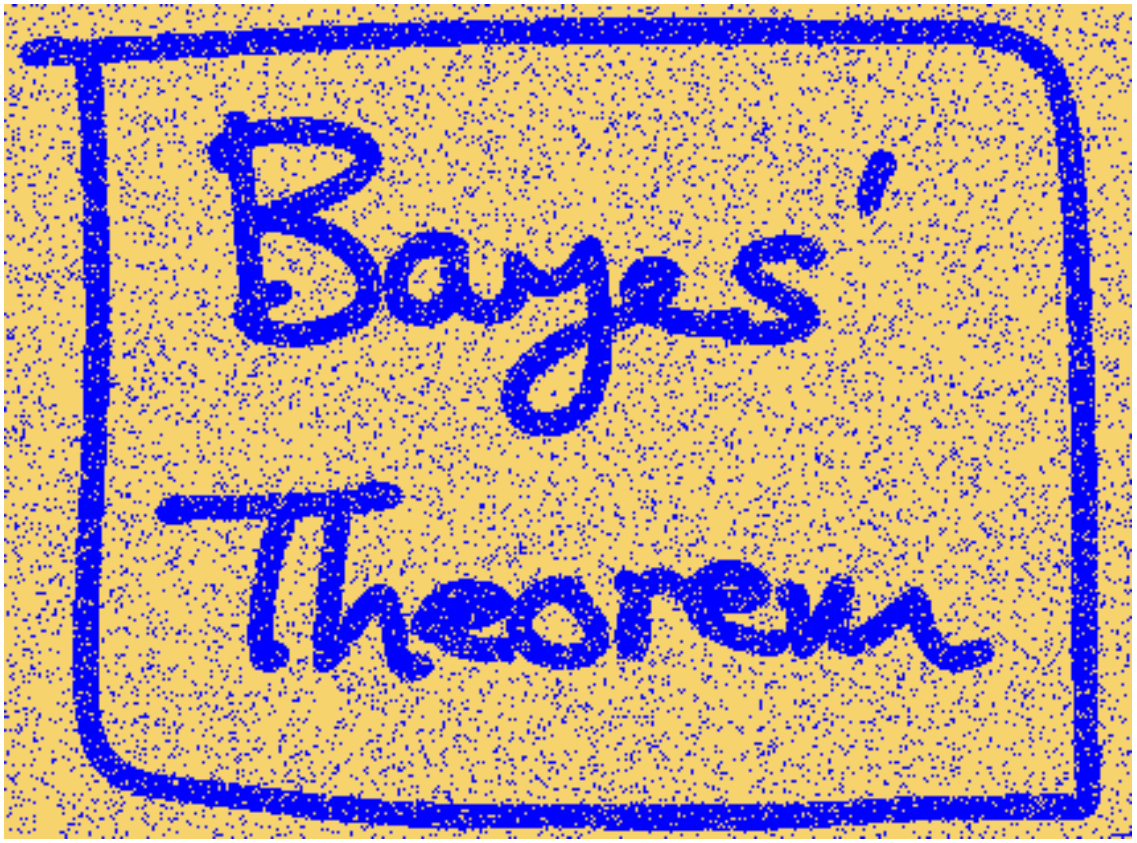


Figure: Chapter 8, Figure 30b

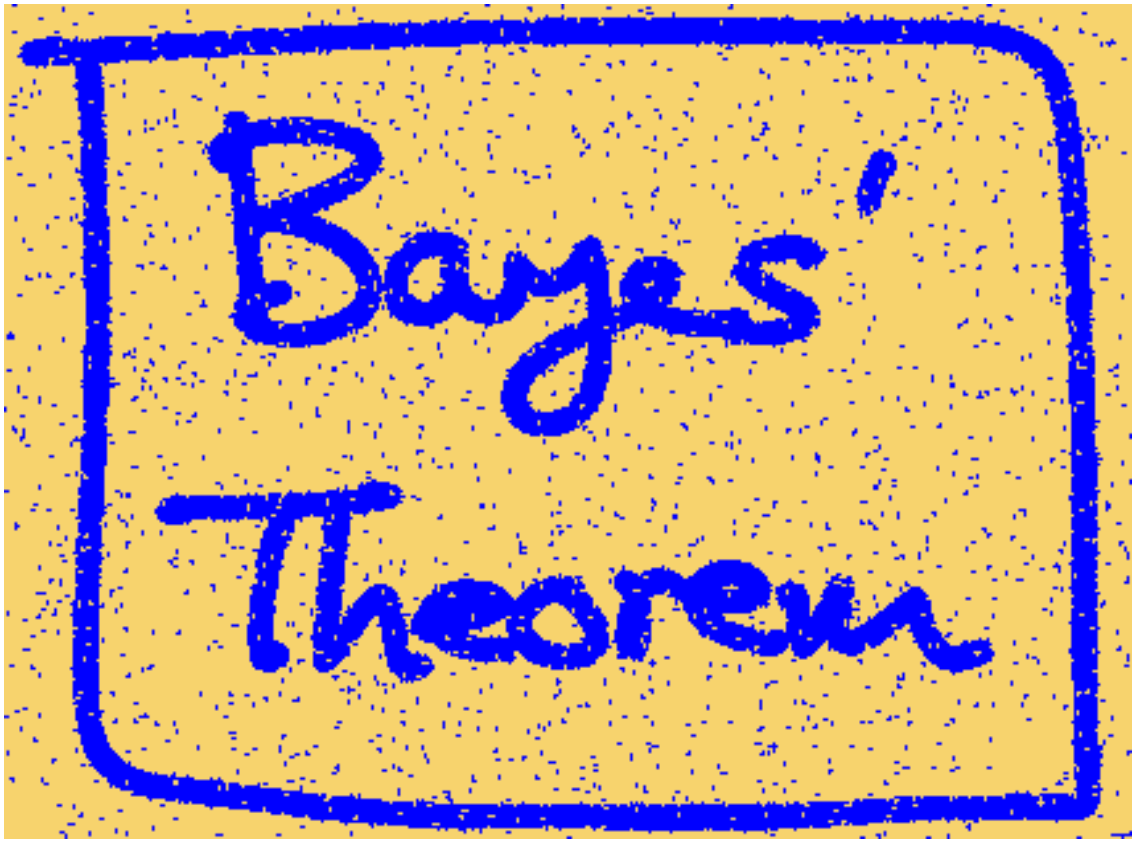


Figure: Chapter 8, Figure 30c

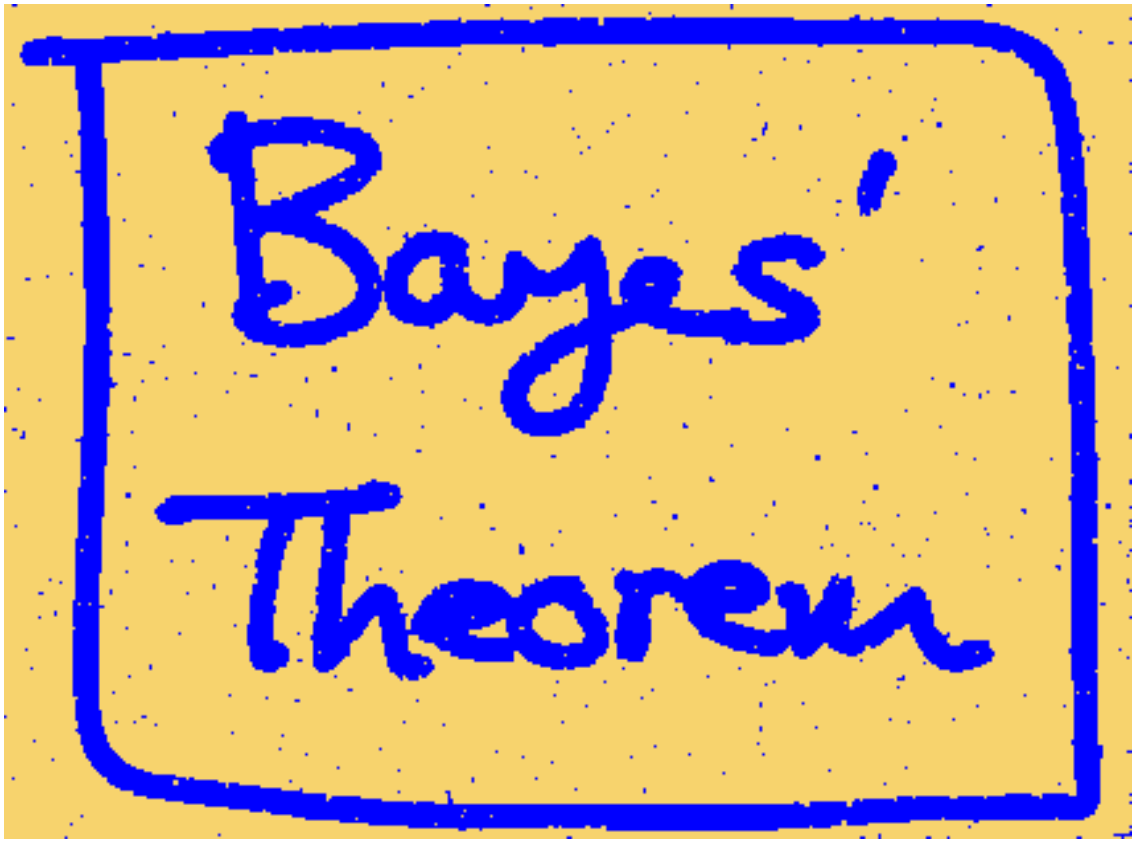


Figure: Chapter 8, Figure 30d

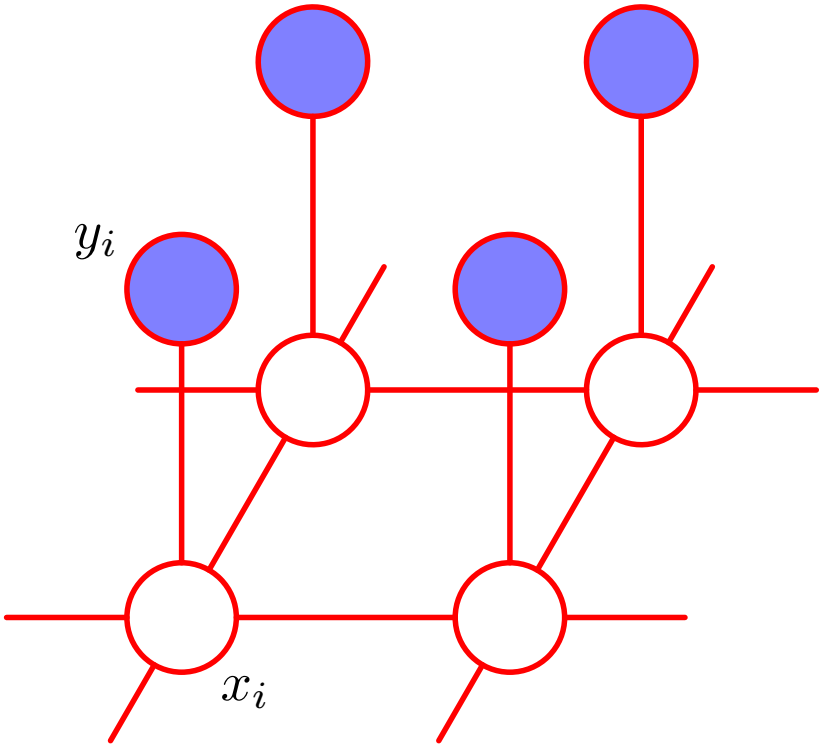


Figure: Chapter 8, Figure 31

Figure: Chapter 8, Figure 32a

Figure: Chapter 8, Figure 32b

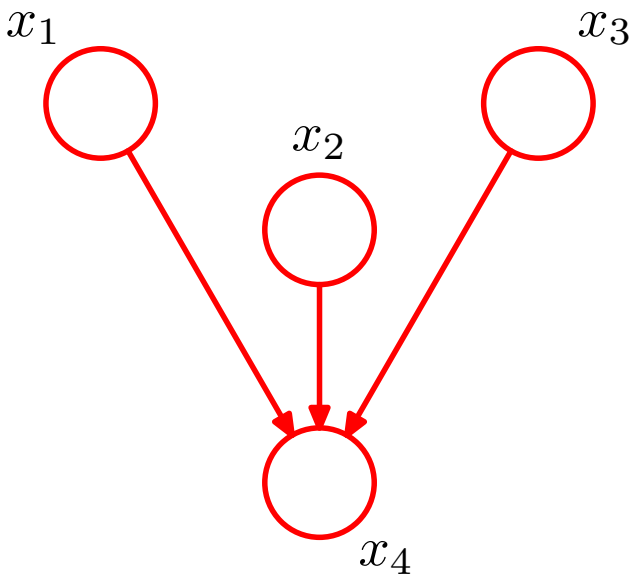


Figure: Chapter 8, Figure 33a

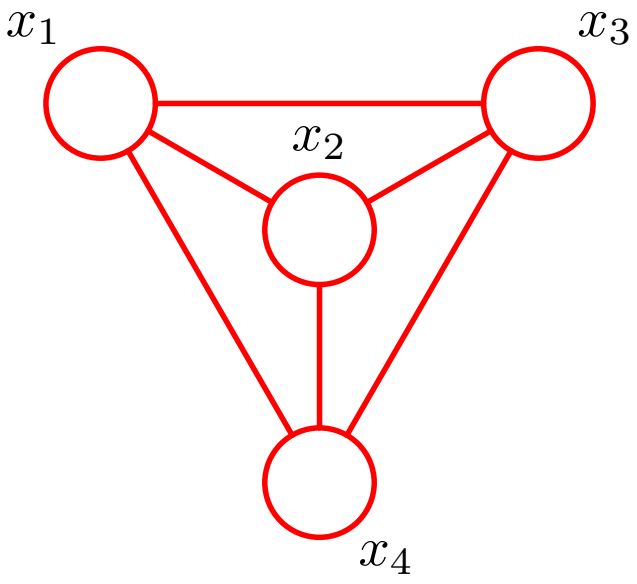


Figure: Chapter 8, Figure 33b

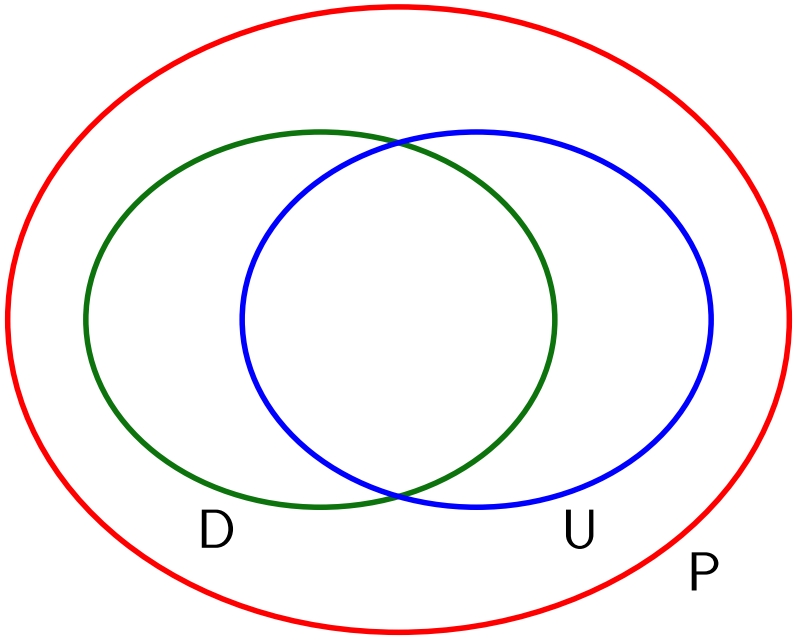


Figure: Chapter 8, Figure 34

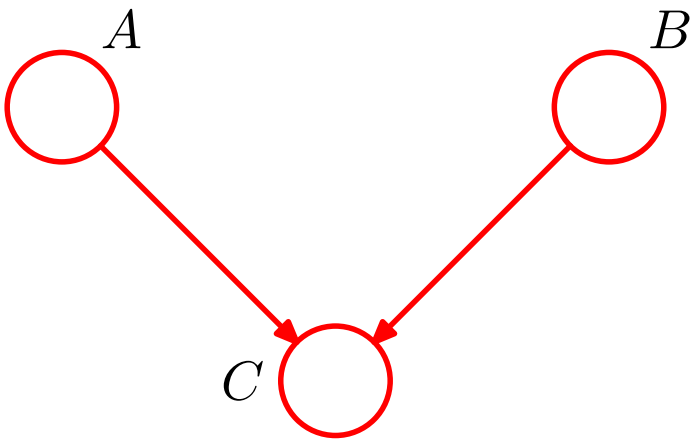


Figure: Chapter 8, Figure 35

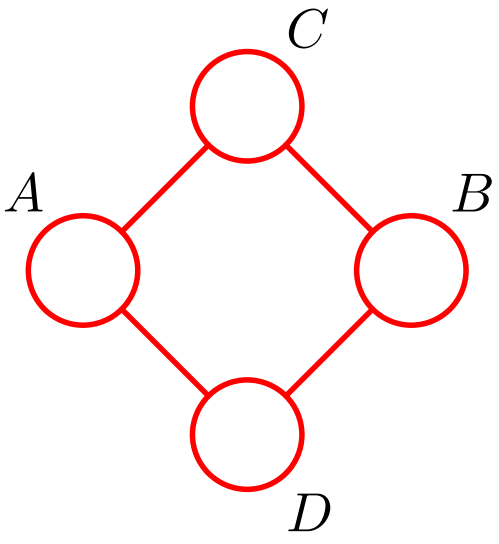


Figure: Chapter 8, Figure 36

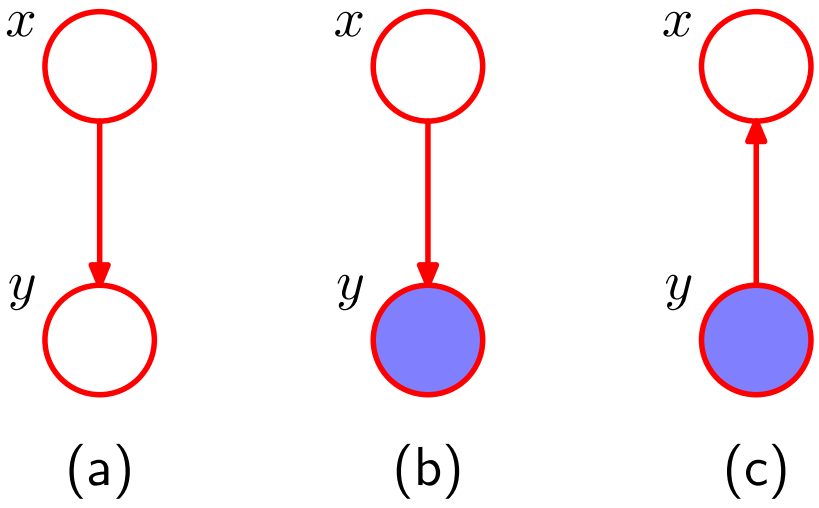


Figure: Chapter 8, Figure 37

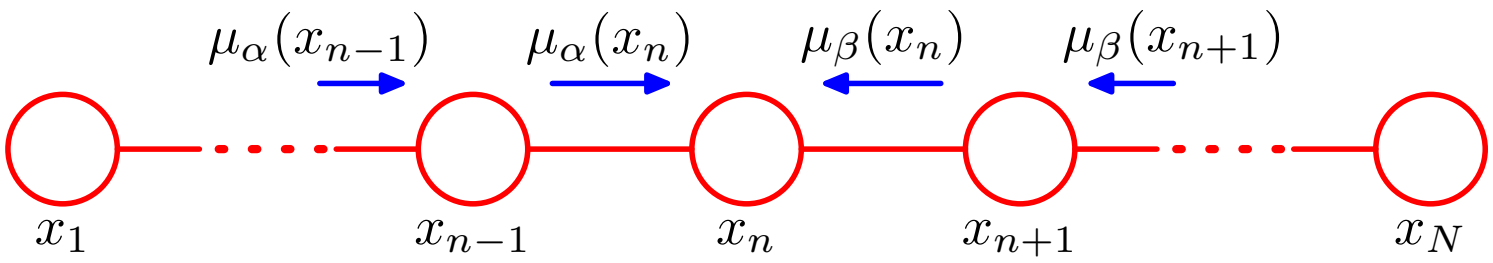


Figure: Chapter 8, Figure 38

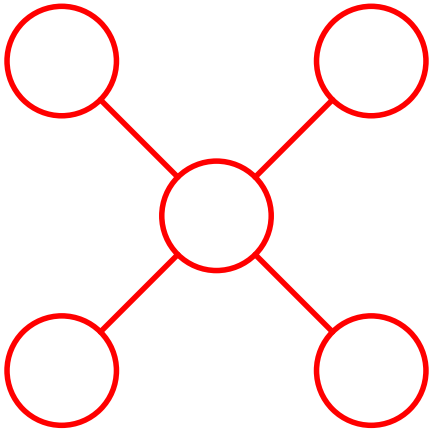


Figure: Chapter 8, Figure 39a

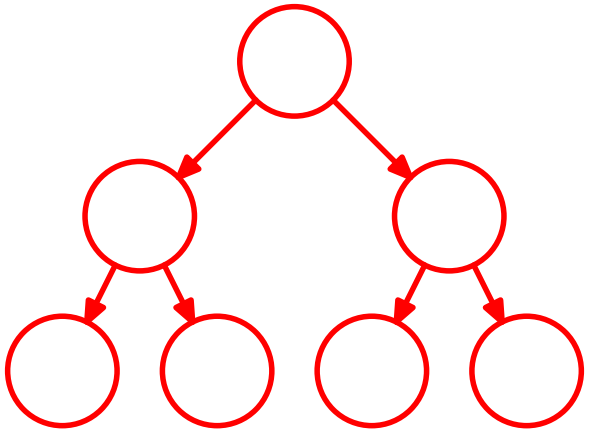


Figure: Chapter 8, Figure 39b

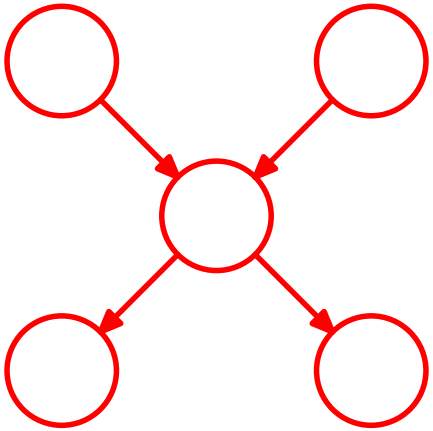


Figure: Chapter 8, Figure 39c

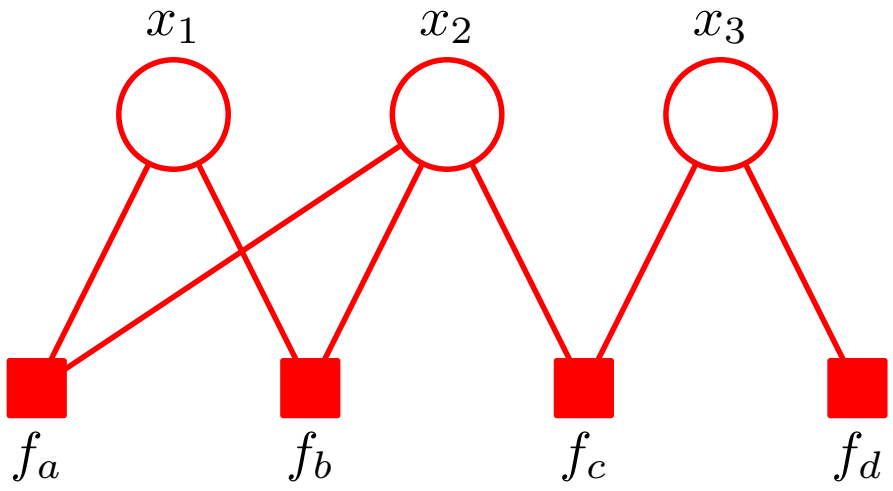


Figure: Chapter 8, Figure 40

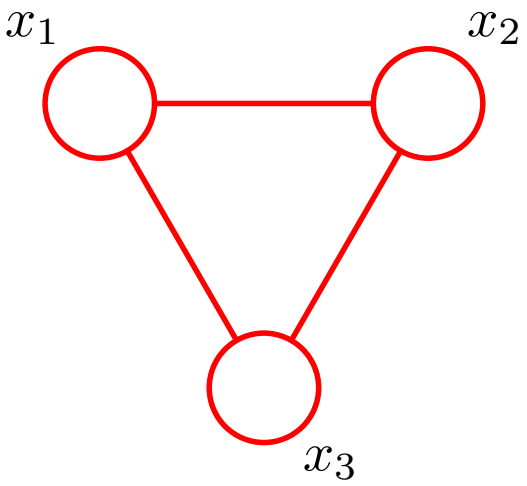


Figure: Chapter 8, Figure 41a

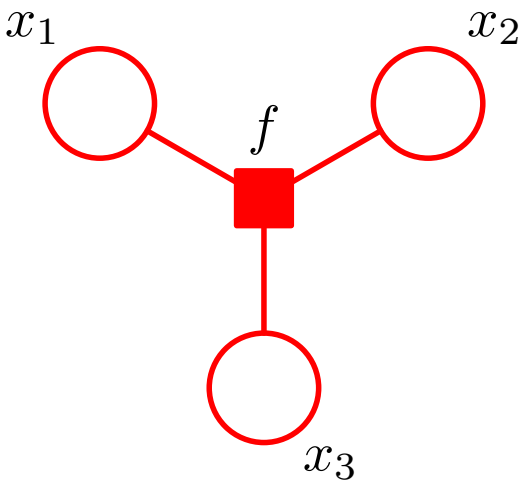


Figure: Chapter 8, Figure 41b

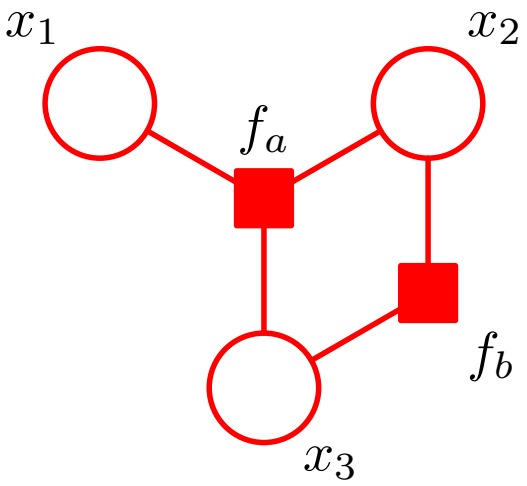


Figure: Chapter 8, Figure 41c

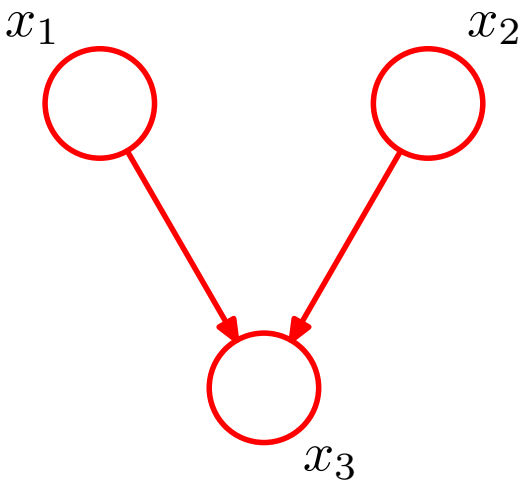


Figure: Chapter 8, Figure 42a

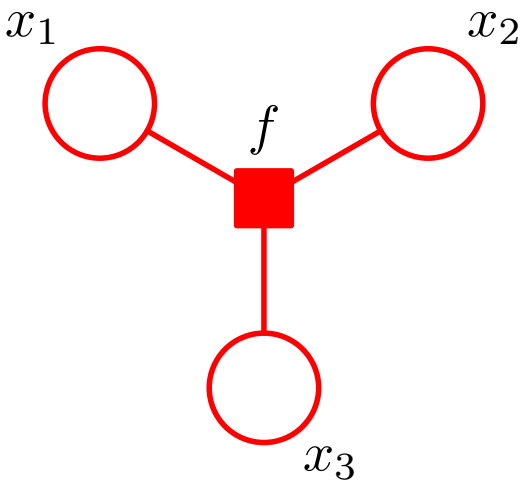


Figure: Chapter 8, Figure 42b

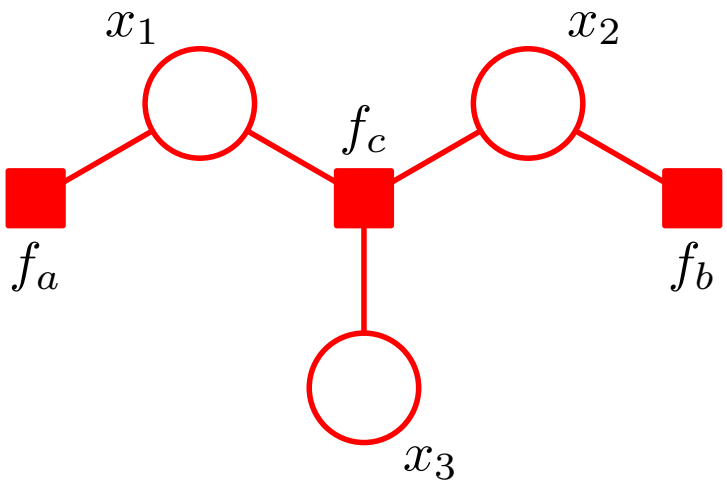


Figure: Chapter 8, Figure 42c

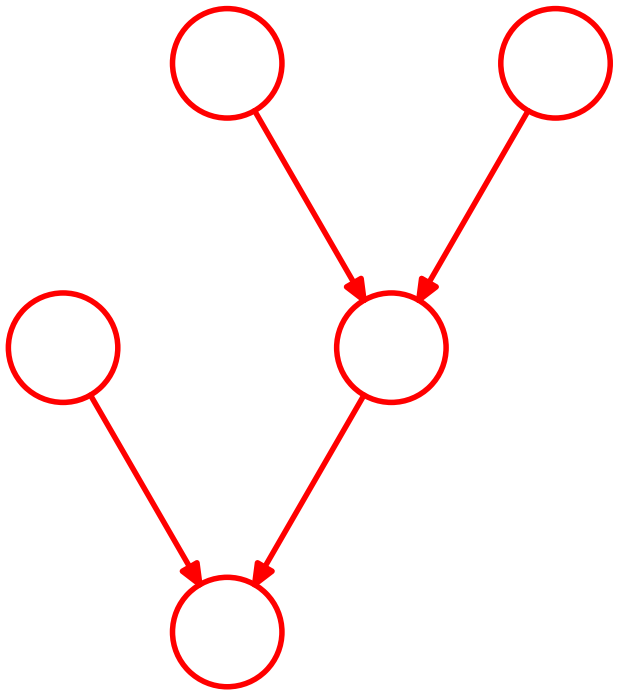


Figure: Chapter 8, Figure 43a

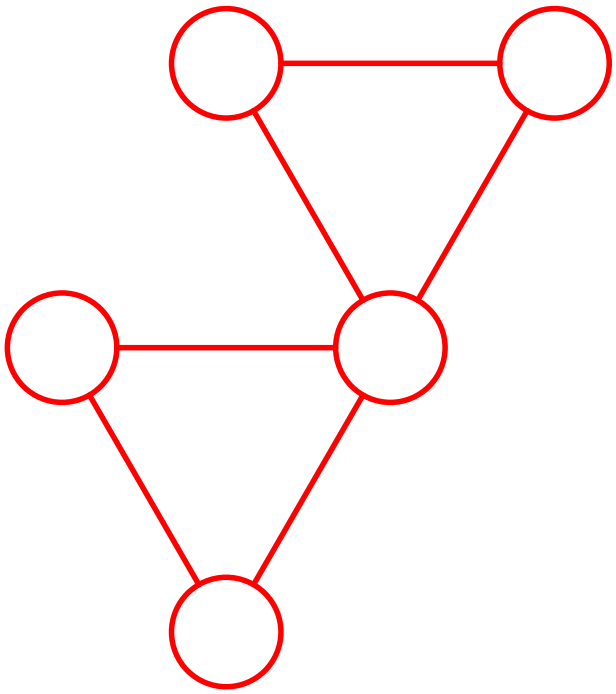


Figure: Chapter 8, Figure 43b

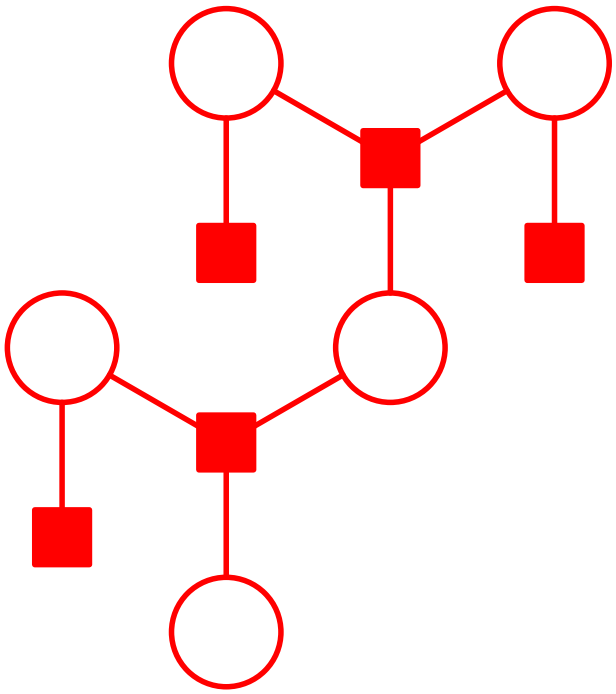


Figure: Chapter 8, Figure 43c

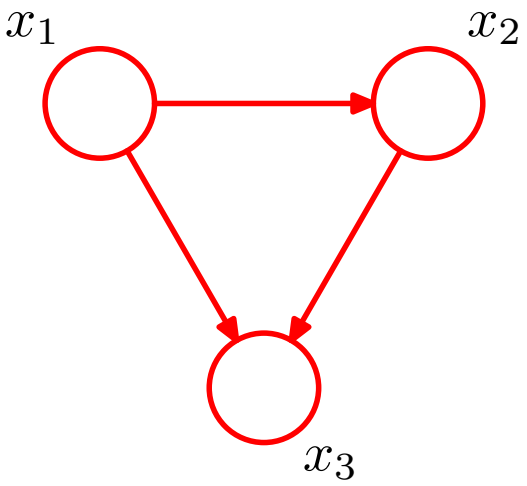


Figure: Chapter 8, Figure 44a

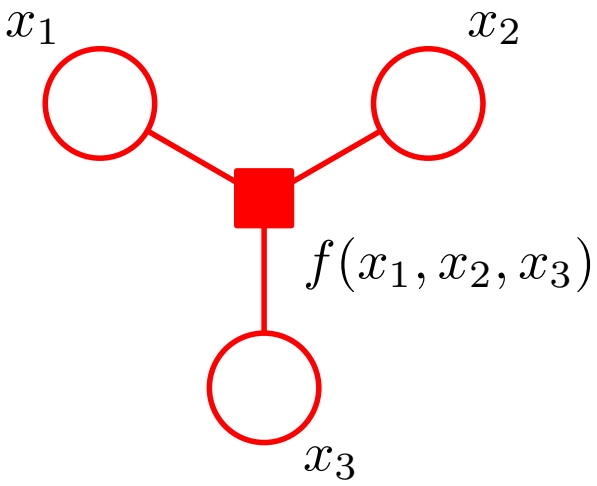


Figure: Chapter 8, Figure 44b

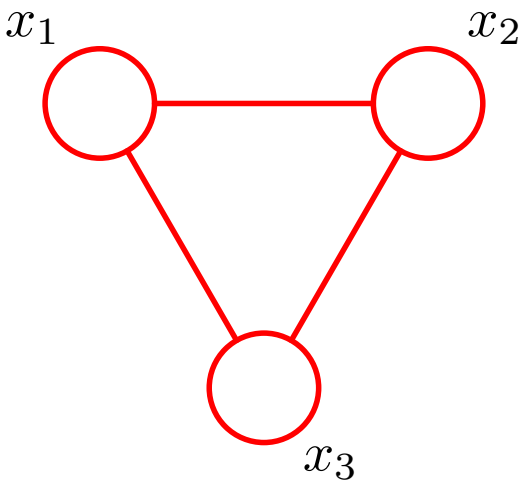


Figure: Chapter 8, Figure 45a

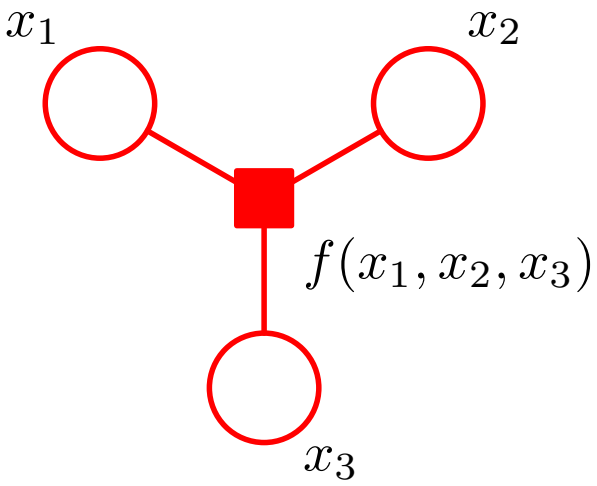


Figure: Chapter 8, Figure 45b

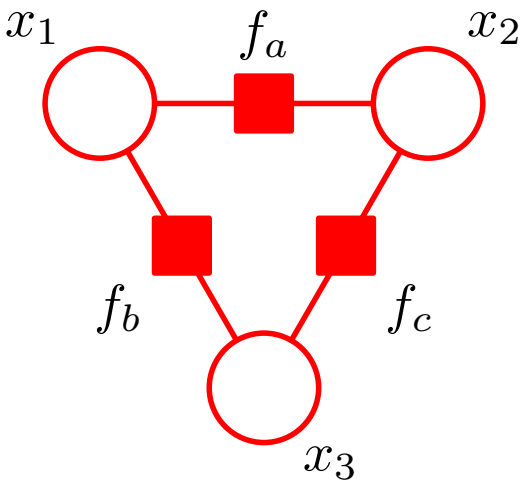


Figure: Chapter 8, Figure 45c

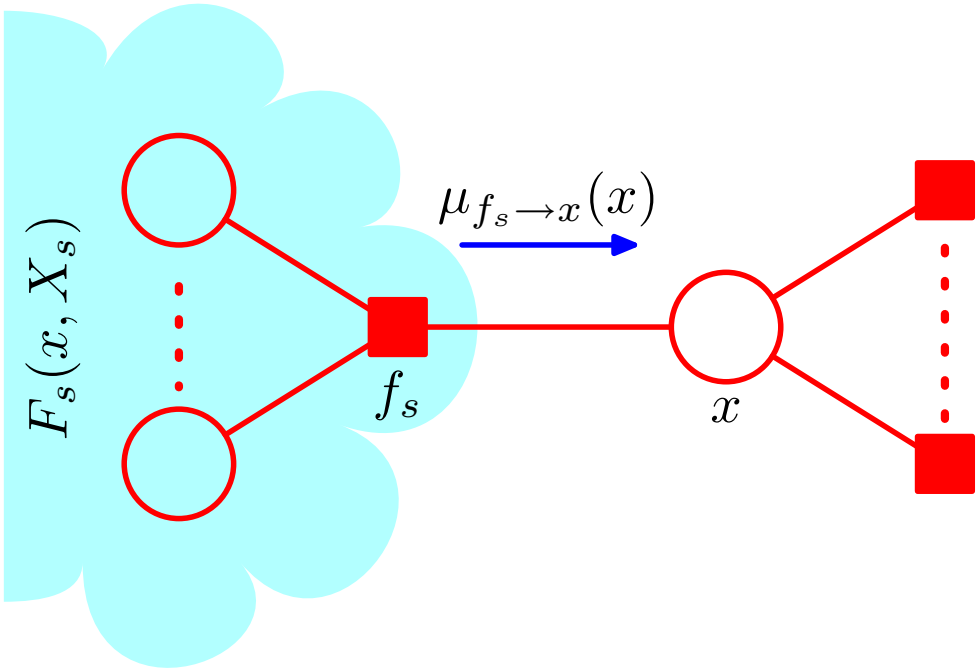


Figure: Chapter 8, Figure 46

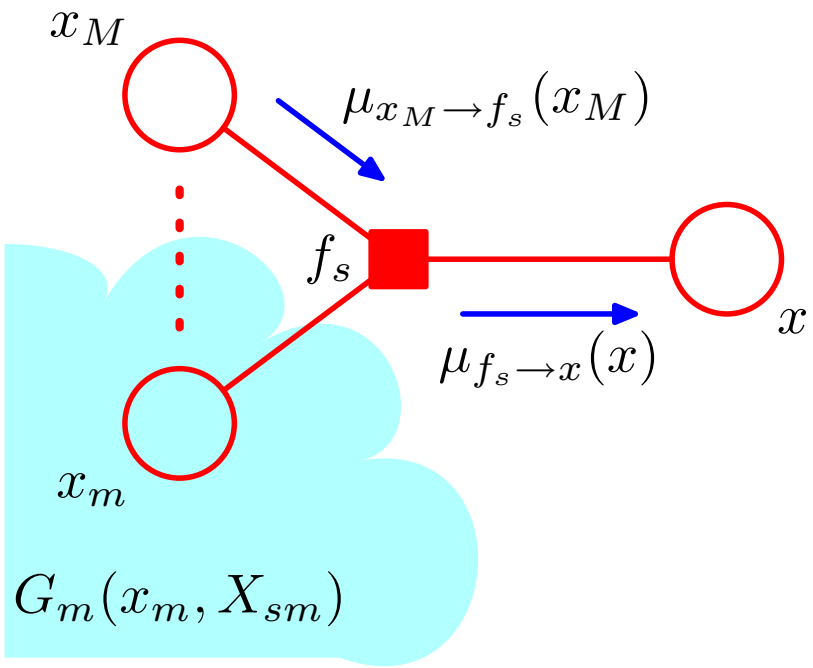


Figure: Chapter 8, Figure 47

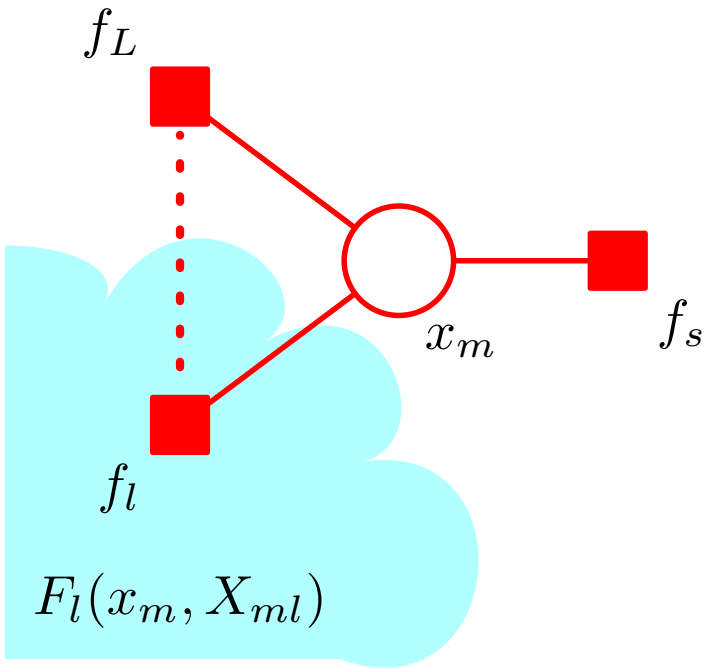


Figure: Chapter 8, Figure 48

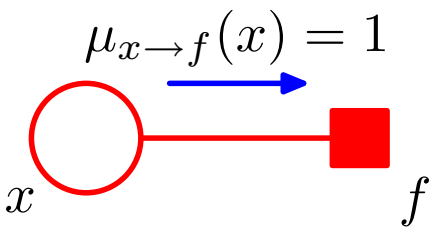


Figure: Chapter 8, Figure 49a

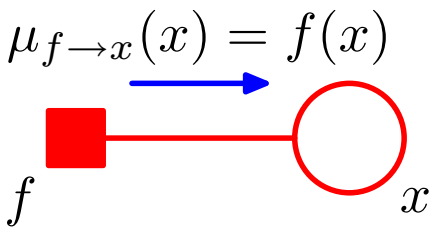


Figure: Chapter 8, Figure 49b

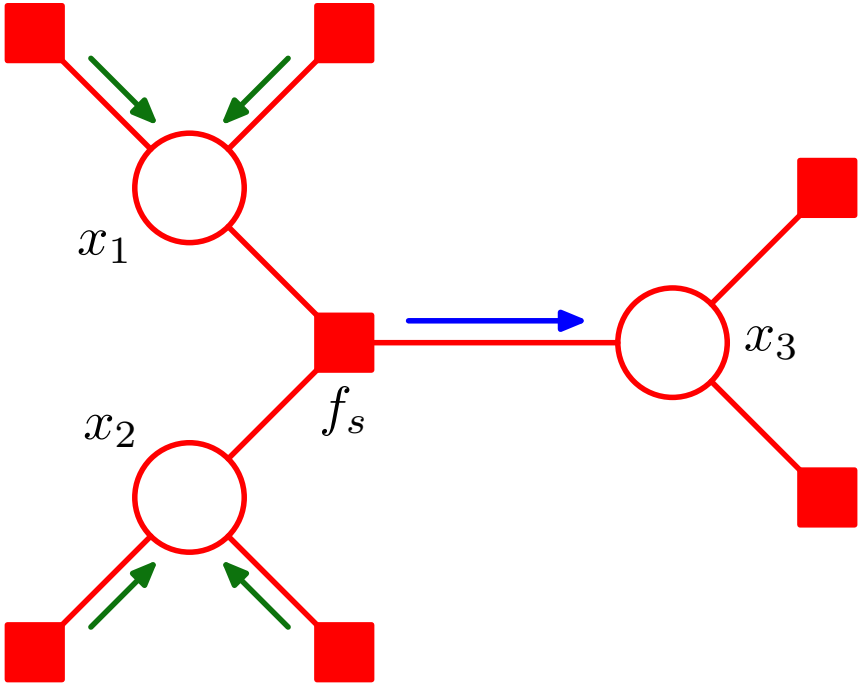


Figure: Chapter 8, Figure 50

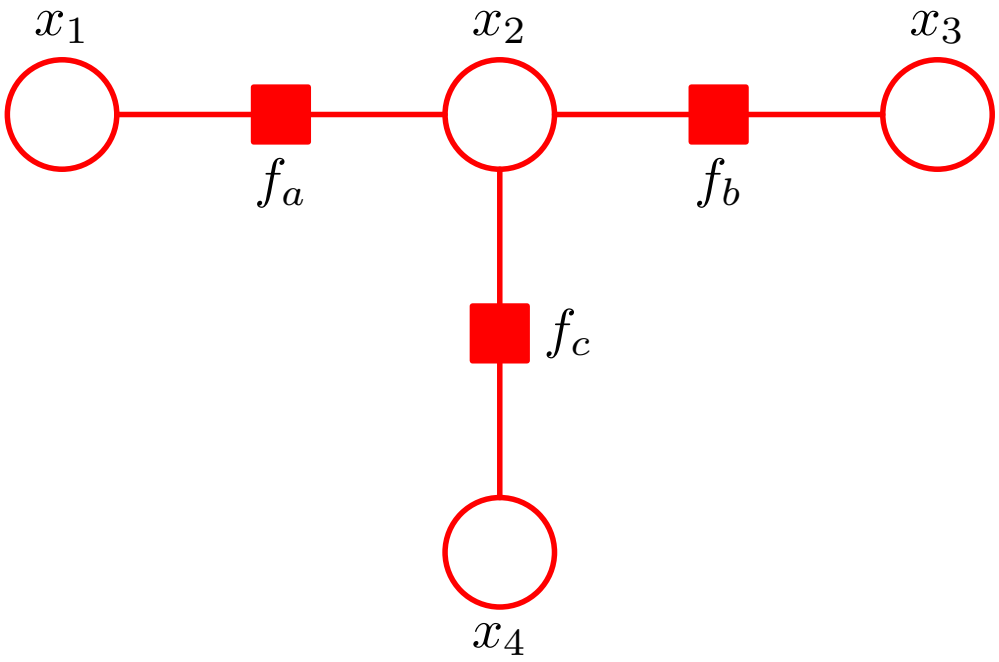


Figure: Chapter 8, Figure 51

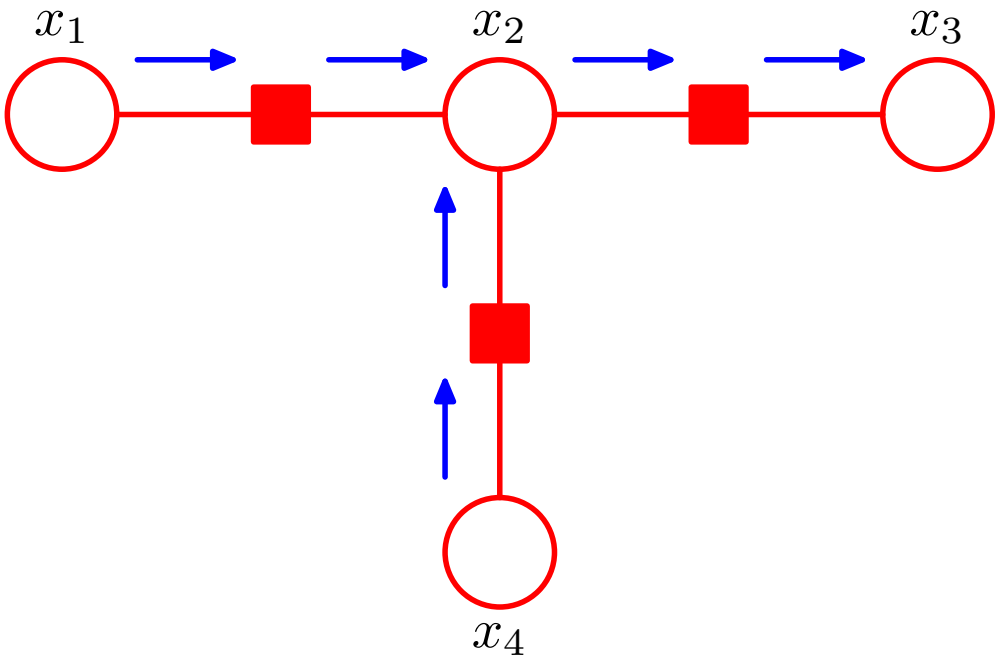


Figure: Chapter 8, Figure 52a

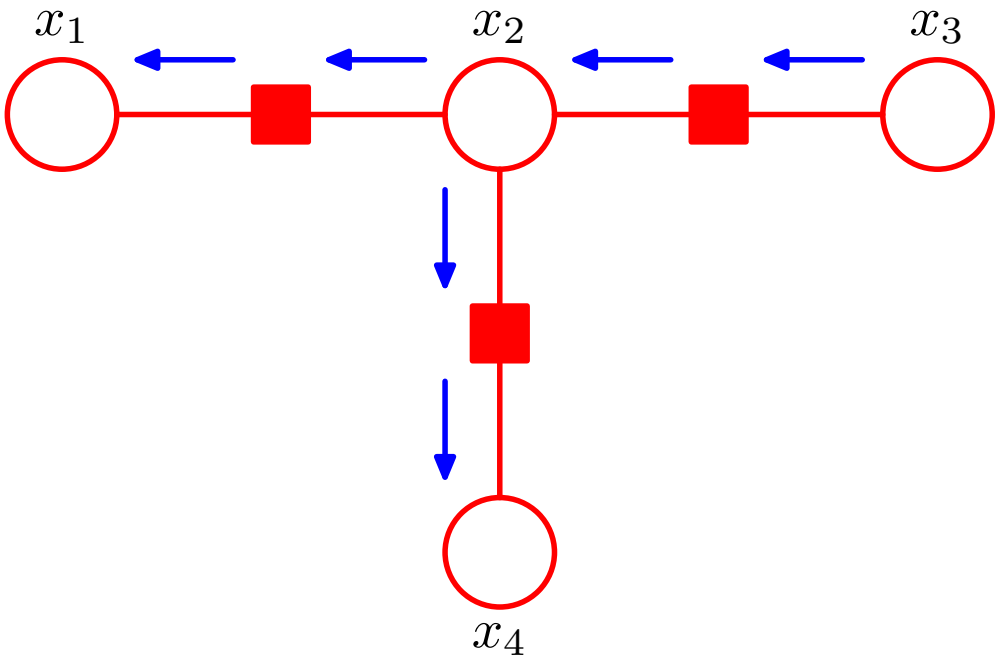


Figure: Chapter 8, Figure 52b

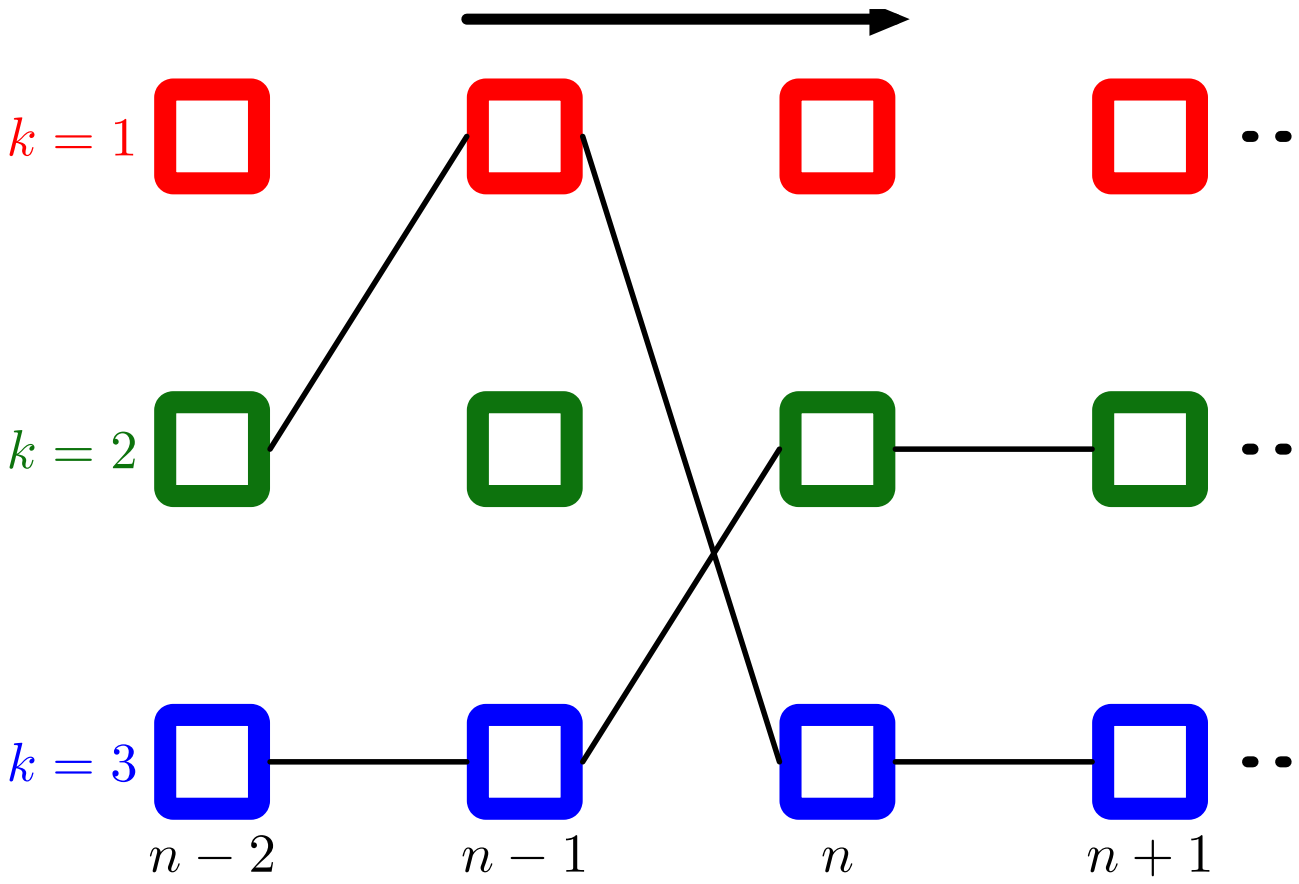


Figure: Chapter 8, Figure 53

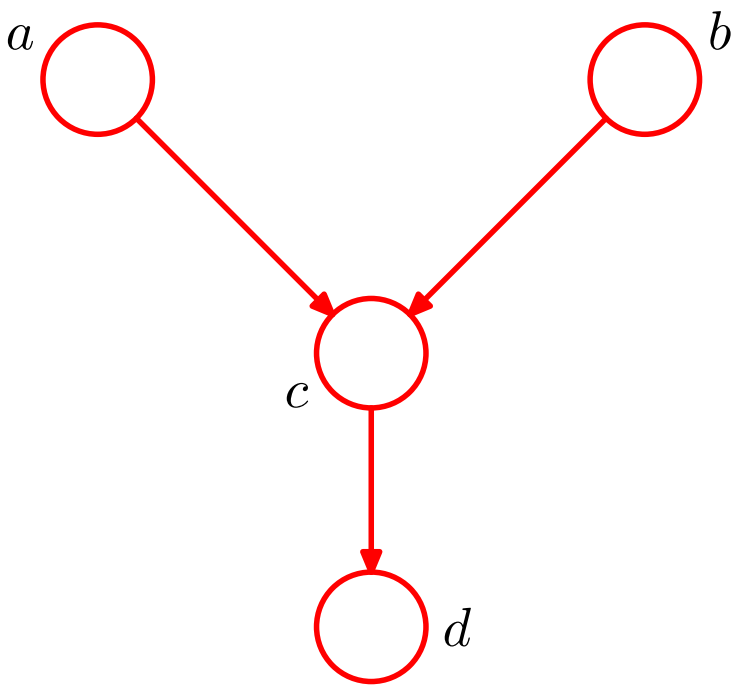


Figure: Chapter 8, Figure 54

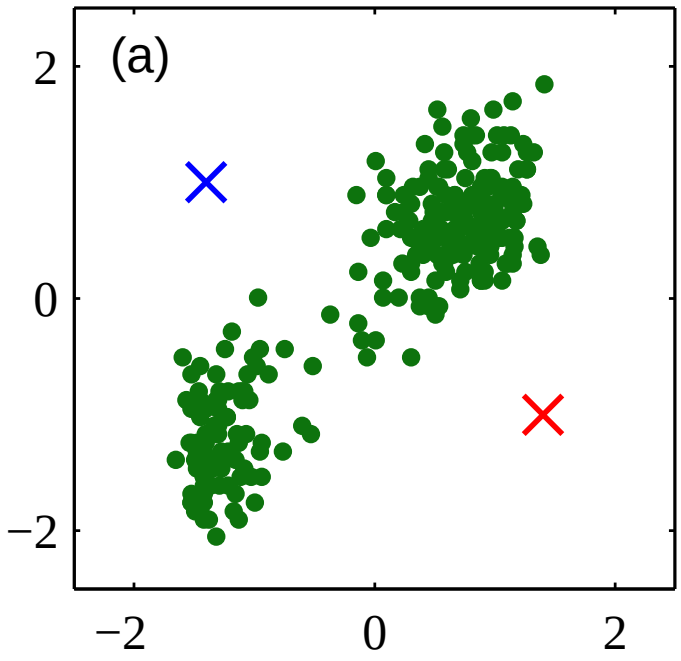


Figure: Chapter 9, Figure 1a

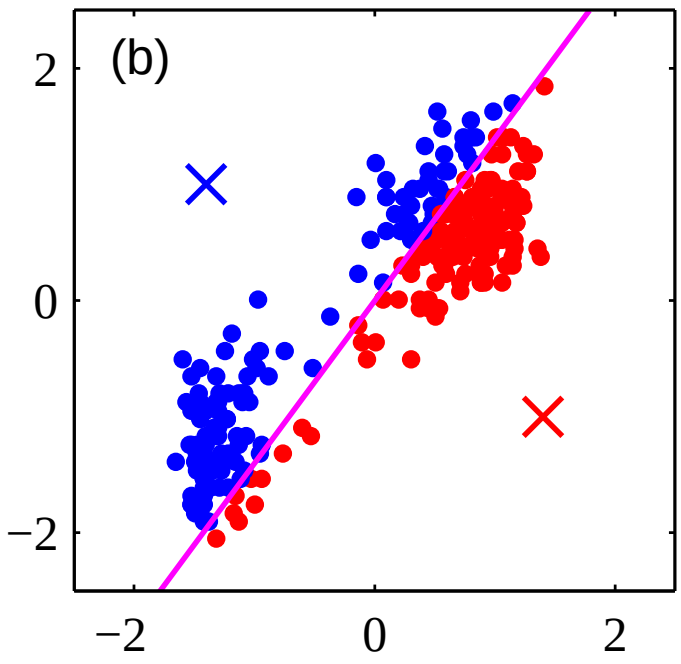


Figure: Chapter 9, Figure 1b

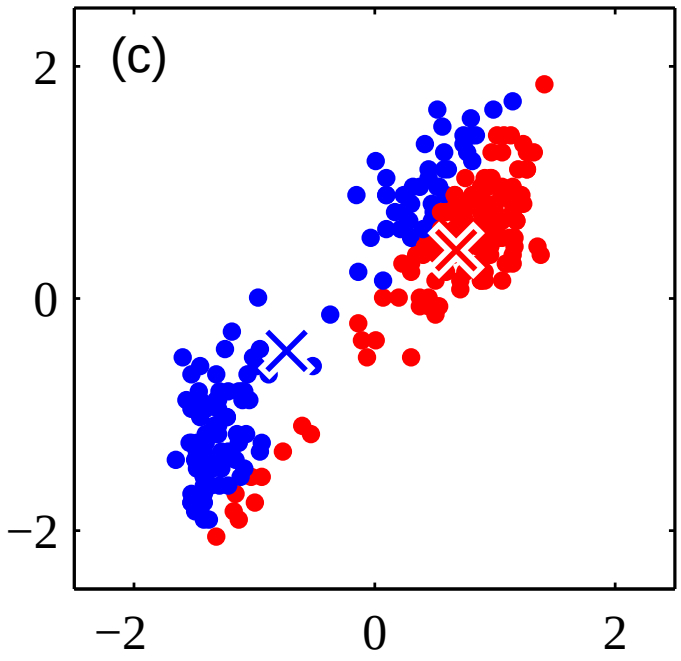


Figure: Chapter 9, Figure 1c

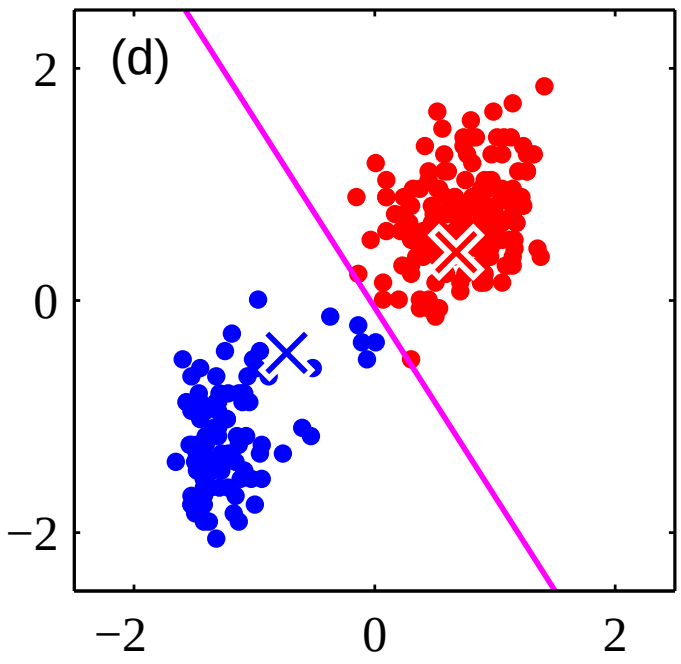


Figure: Chapter 9, Figure 1d

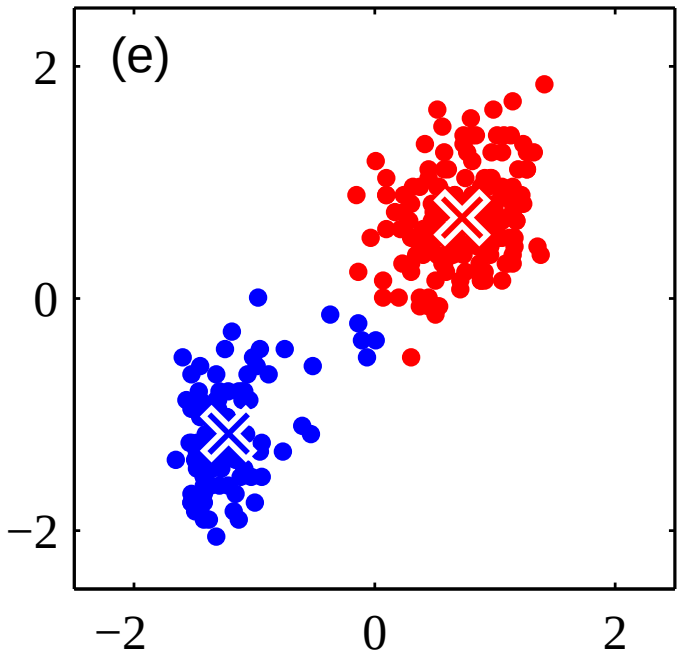


Figure: Chapter 9, Figure 1e

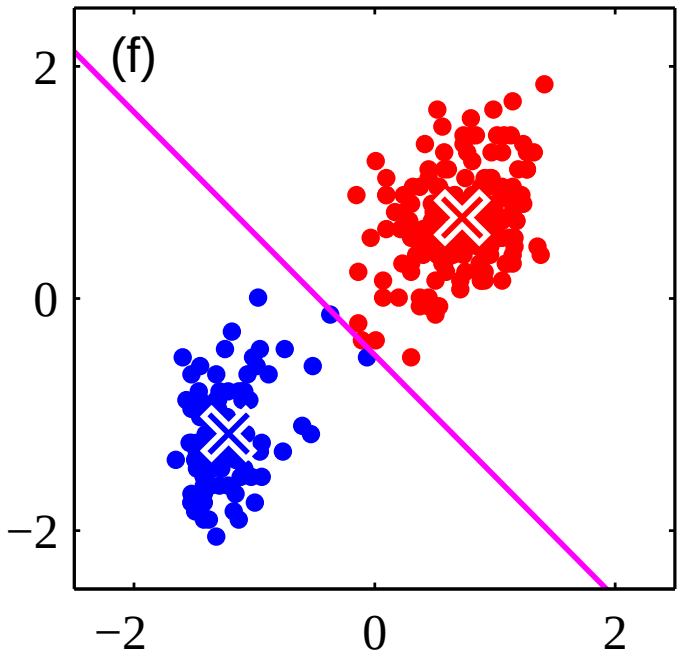


Figure: Chapter 9, Figure 1f

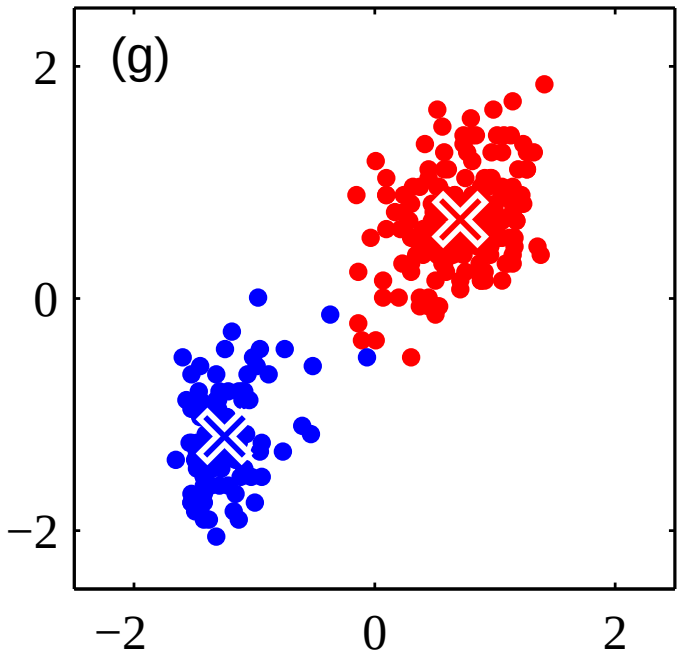


Figure: Chapter 9, Figure 1g

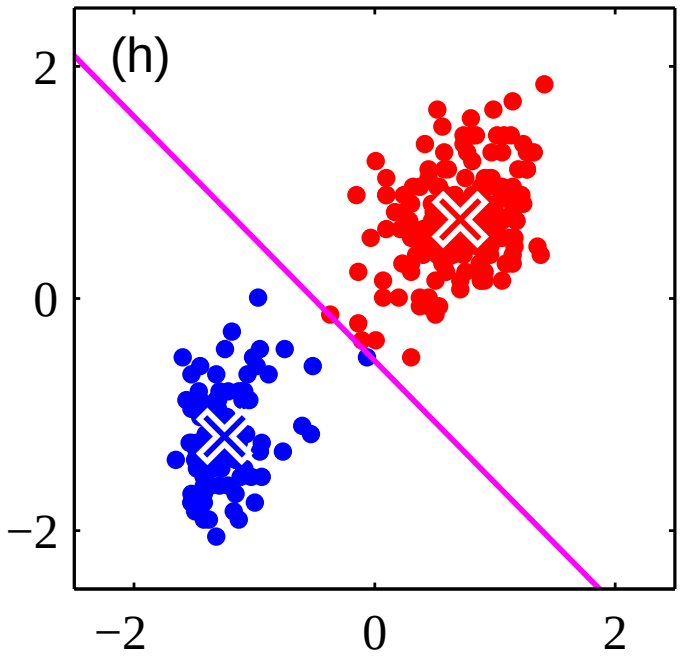


Figure: Chapter 9, Figure 1h

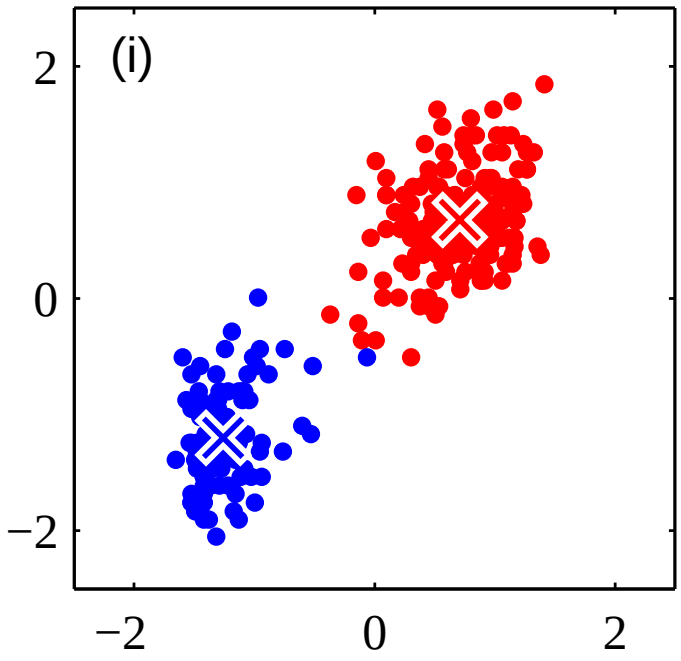


Figure: Chapter 9, Figure 1i

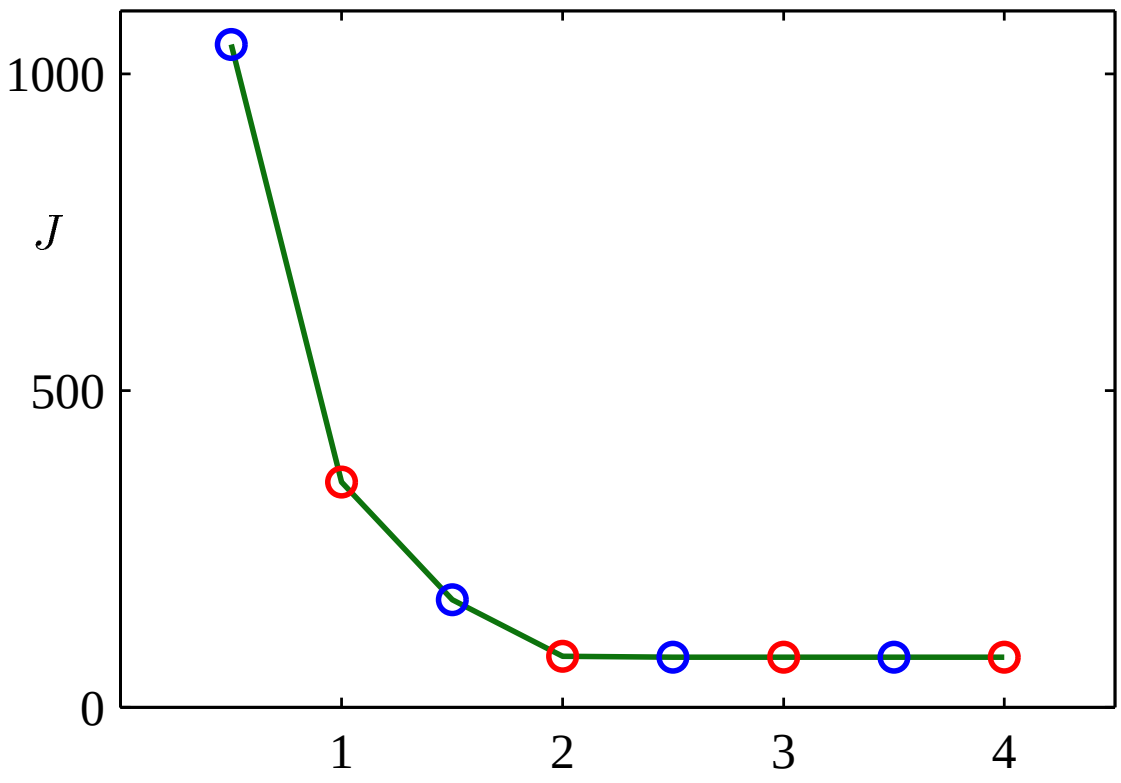


Figure: Chapter 9, Figure 2

$K = 2$

Figure: Chapter 9, Figure 3a

$K = 3$

Figure: Chapter 9, Figure 3b

$K = 10$

Figure: Chapter 9, Figure 3c

Original image

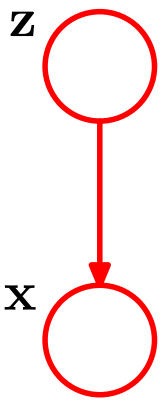
Figure: Chapter 9, Figure 3d

Figure: Chapter 9, Figure 3e

Figure: Chapter 9, Figure 3f

Figure: Chapter 9, Figure 3g

Figure: Chapter 9, Figure 3h



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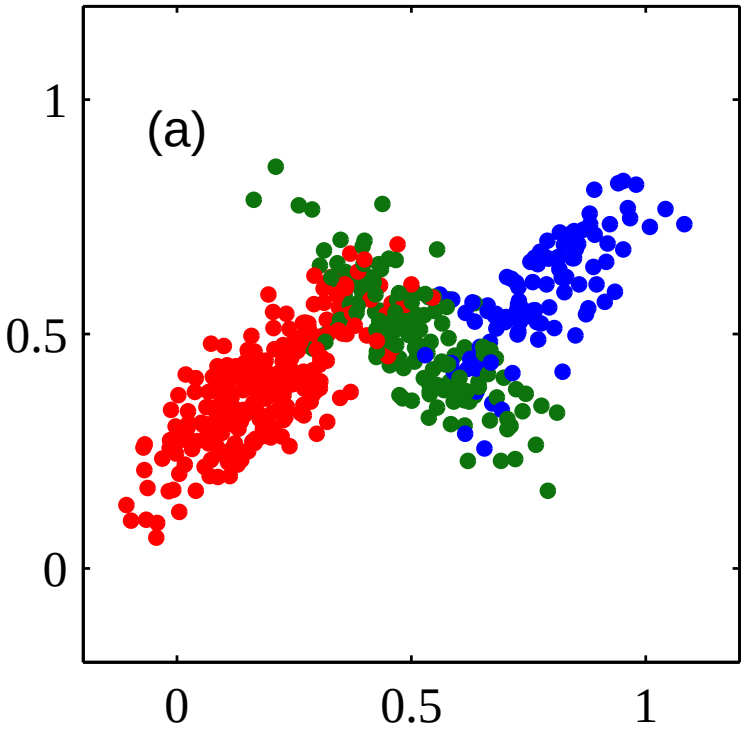

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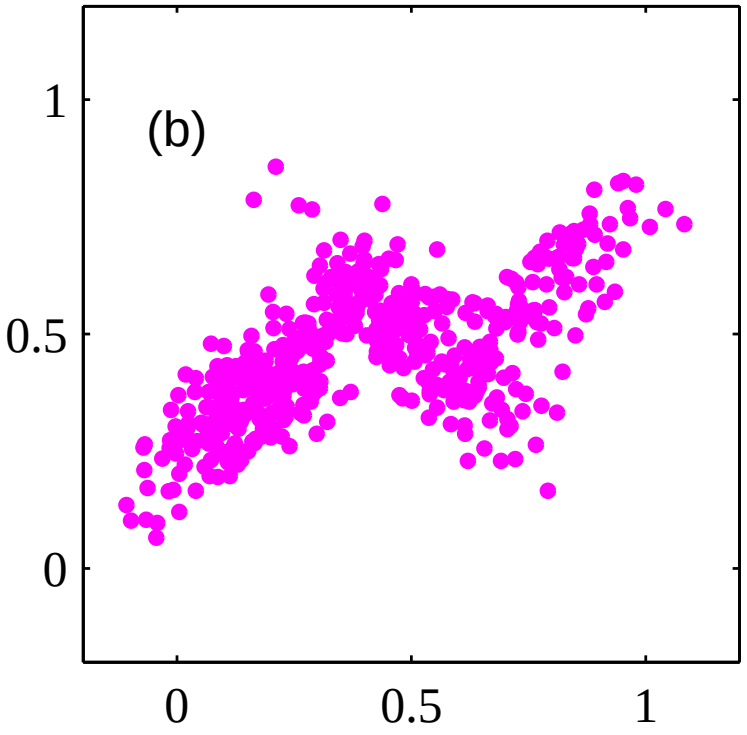

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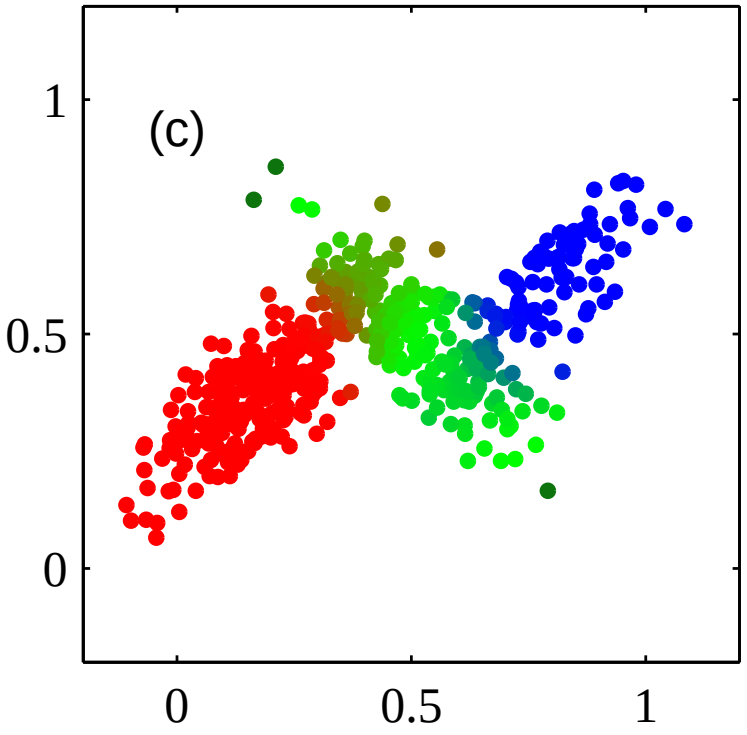

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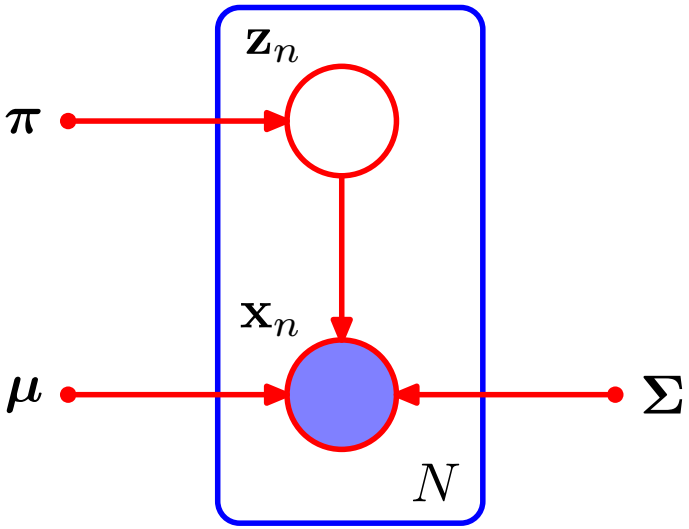


Figure: Chapter 9, Figure 6

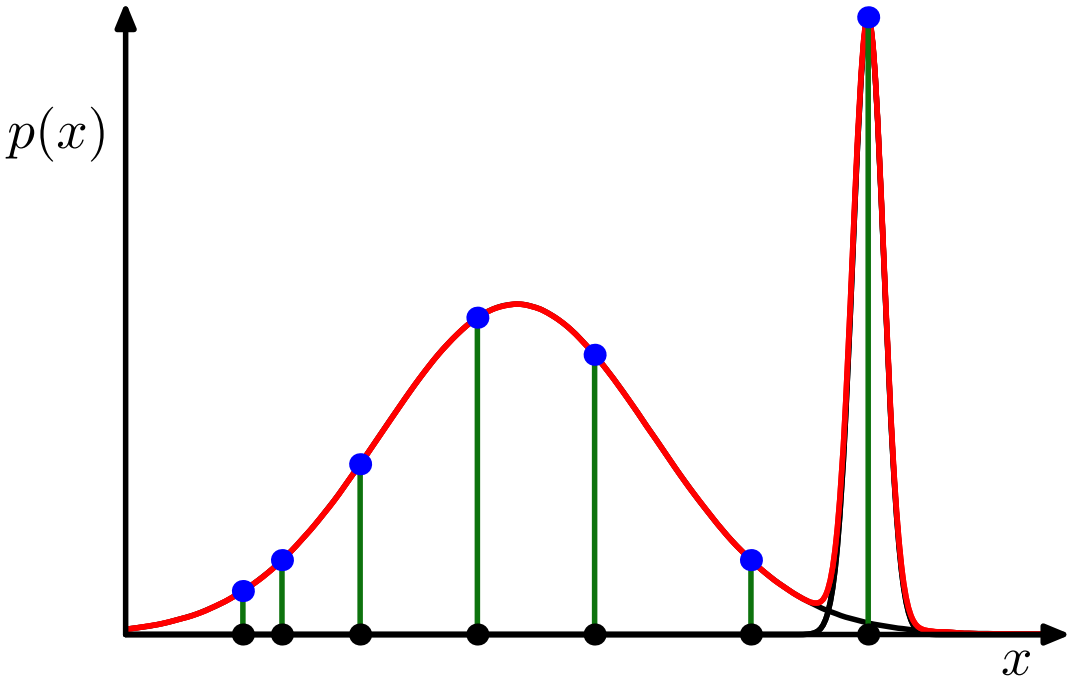


Figure: Chapter 9, Figure 7

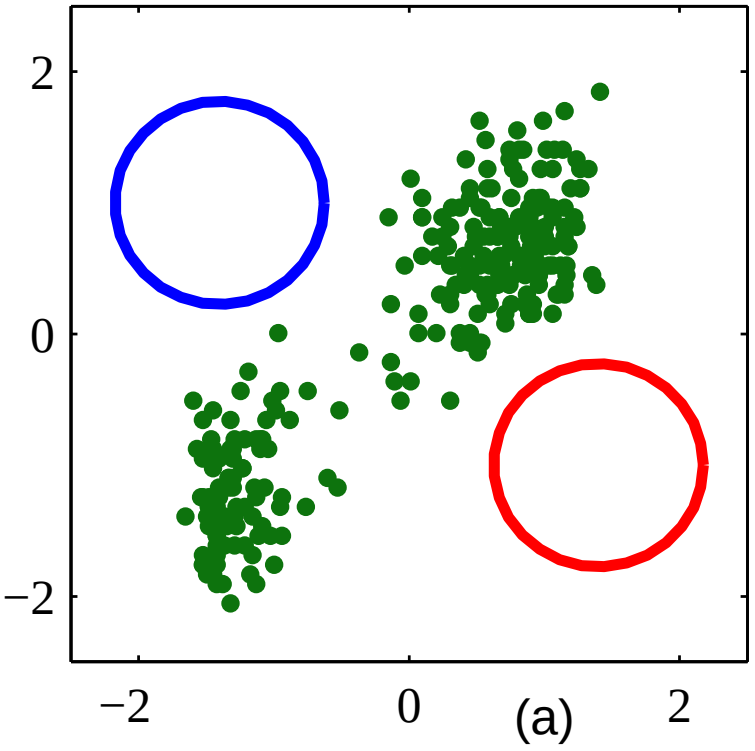
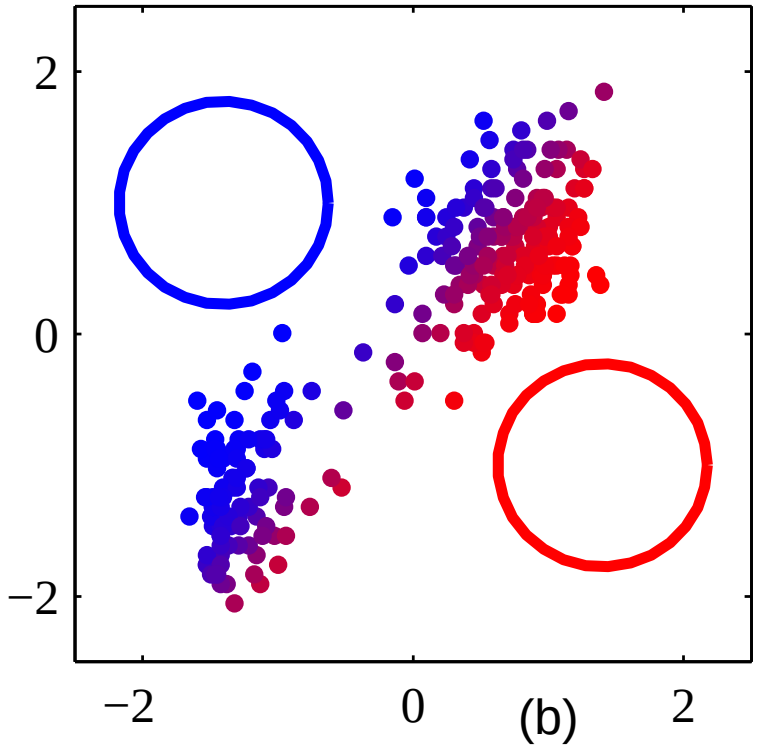


Figure: Chapter 9, Figure 8a



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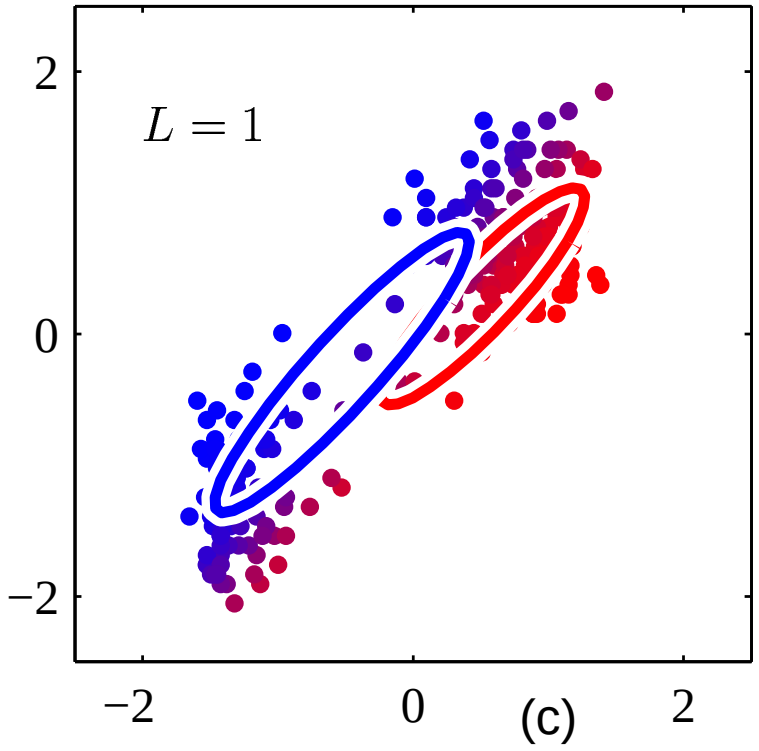

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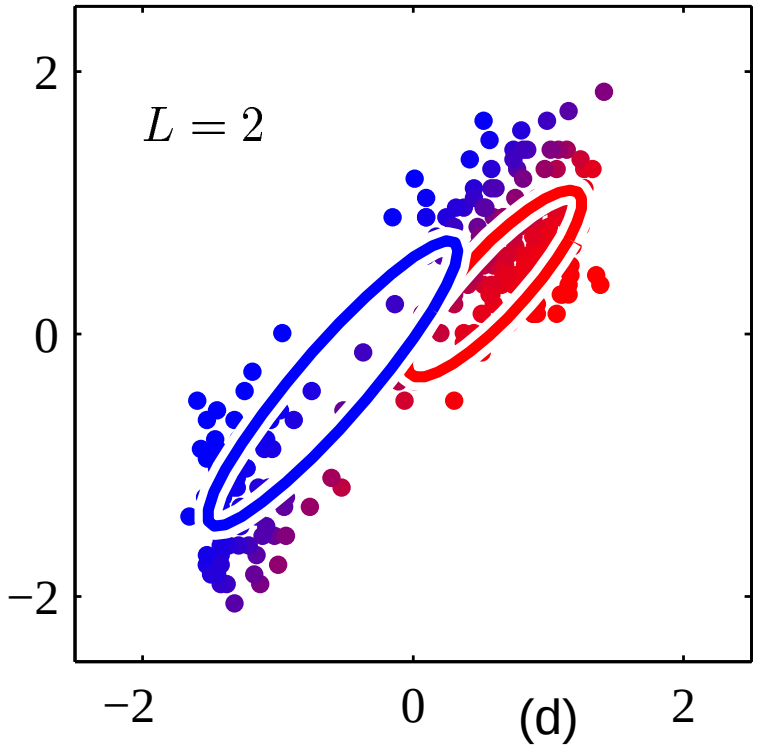
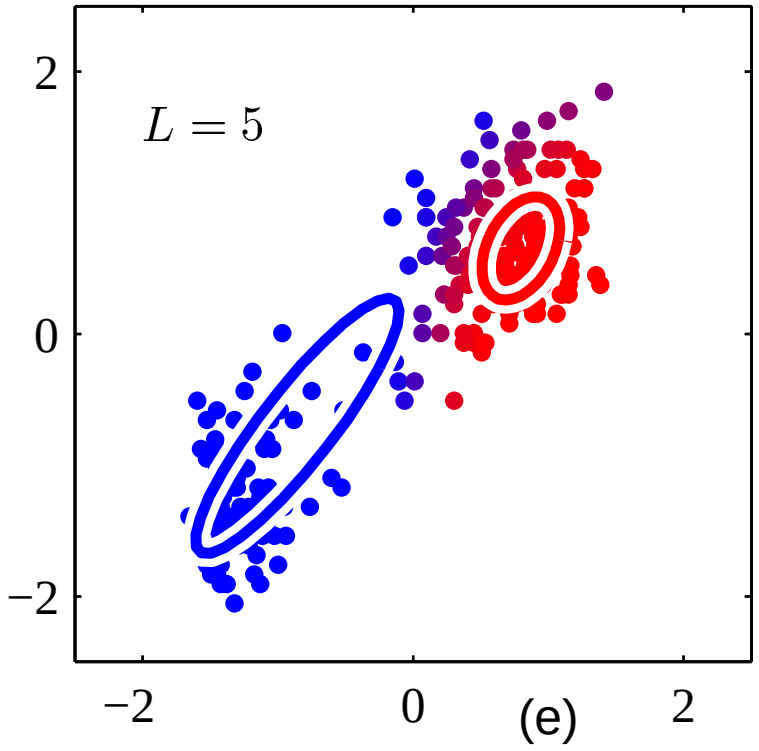


Figure: Chapter 9, Figure 8d



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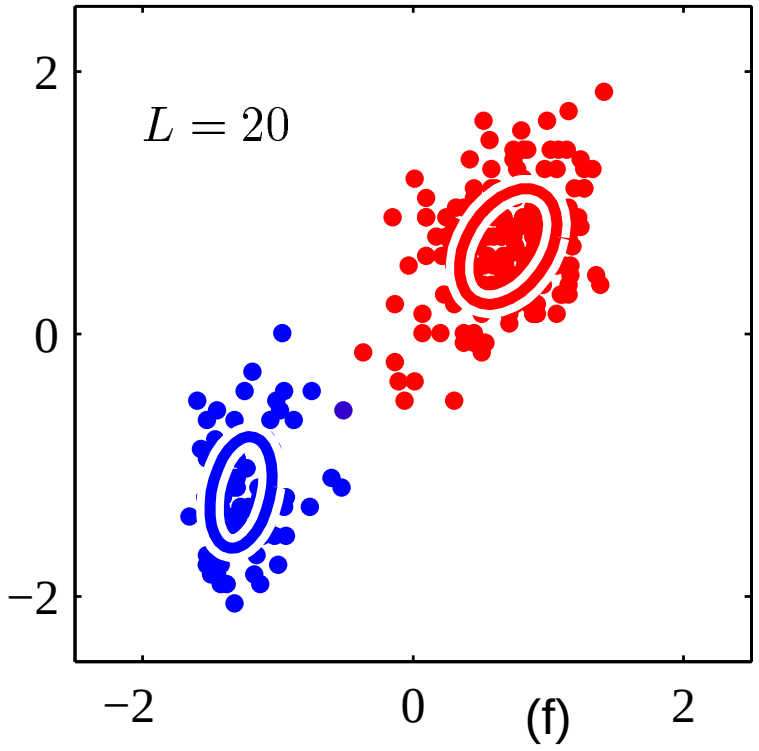


Figure: Chapter 9, Figure 8f

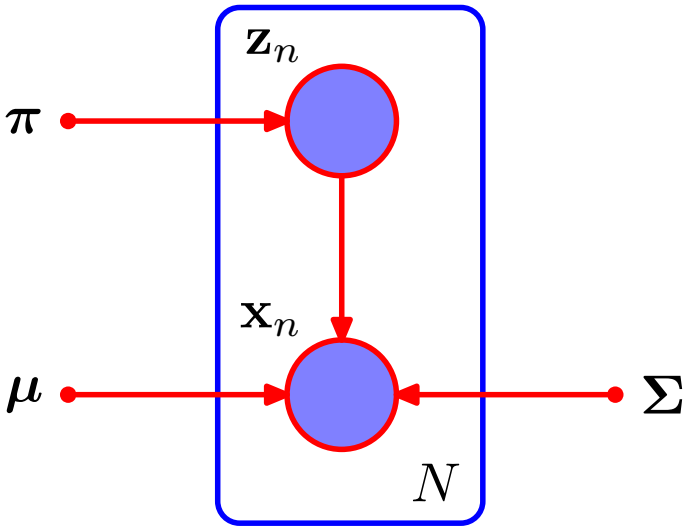


Figure: Chapter 9, Figure 9

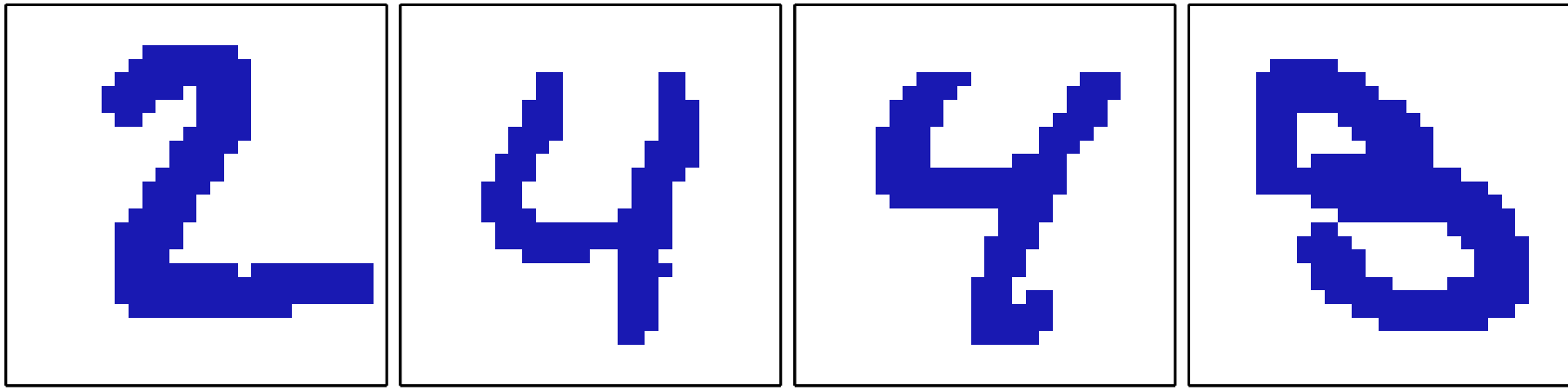


Figure: Chapter 9, Figure 10a

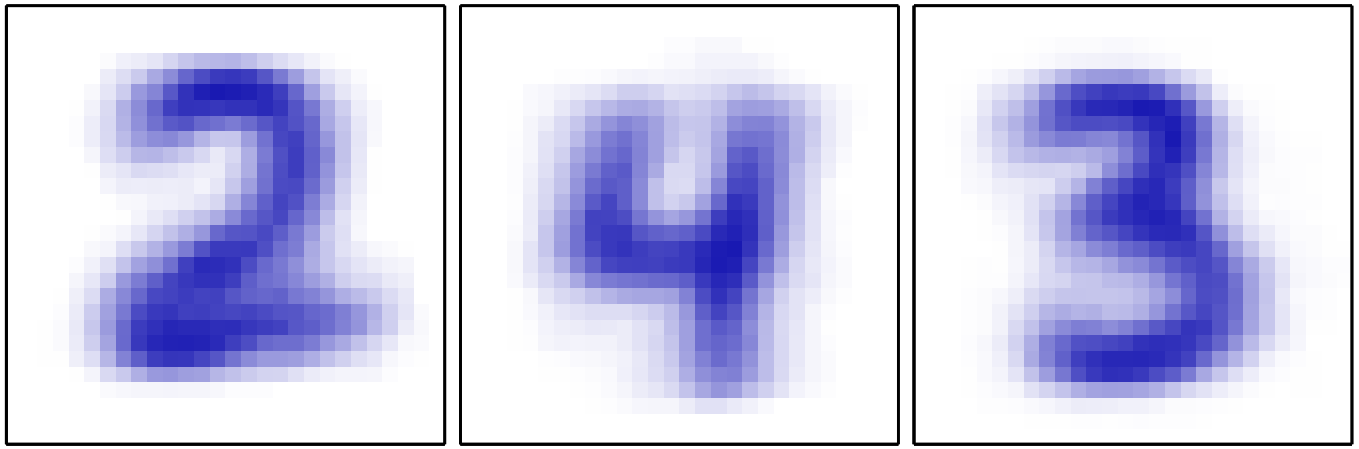


Figure: Chapter 9, Figure 10b

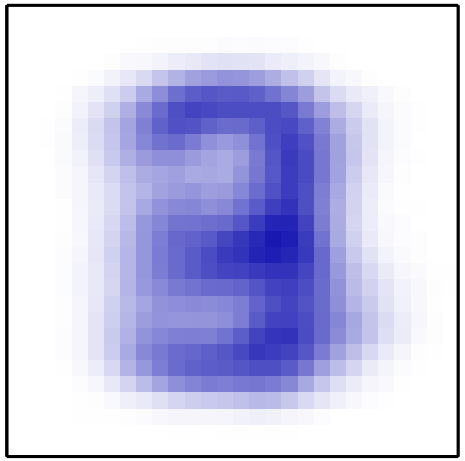


Figure: Chapter 9, Figure 10c

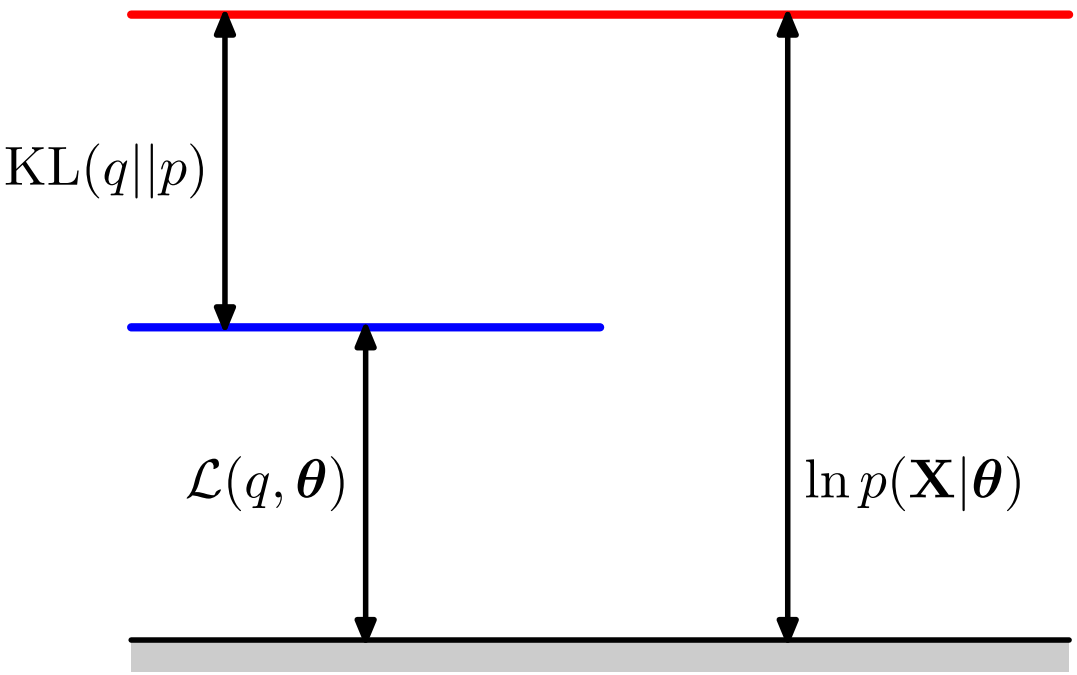


Figure: Chapter 9, Figure 11

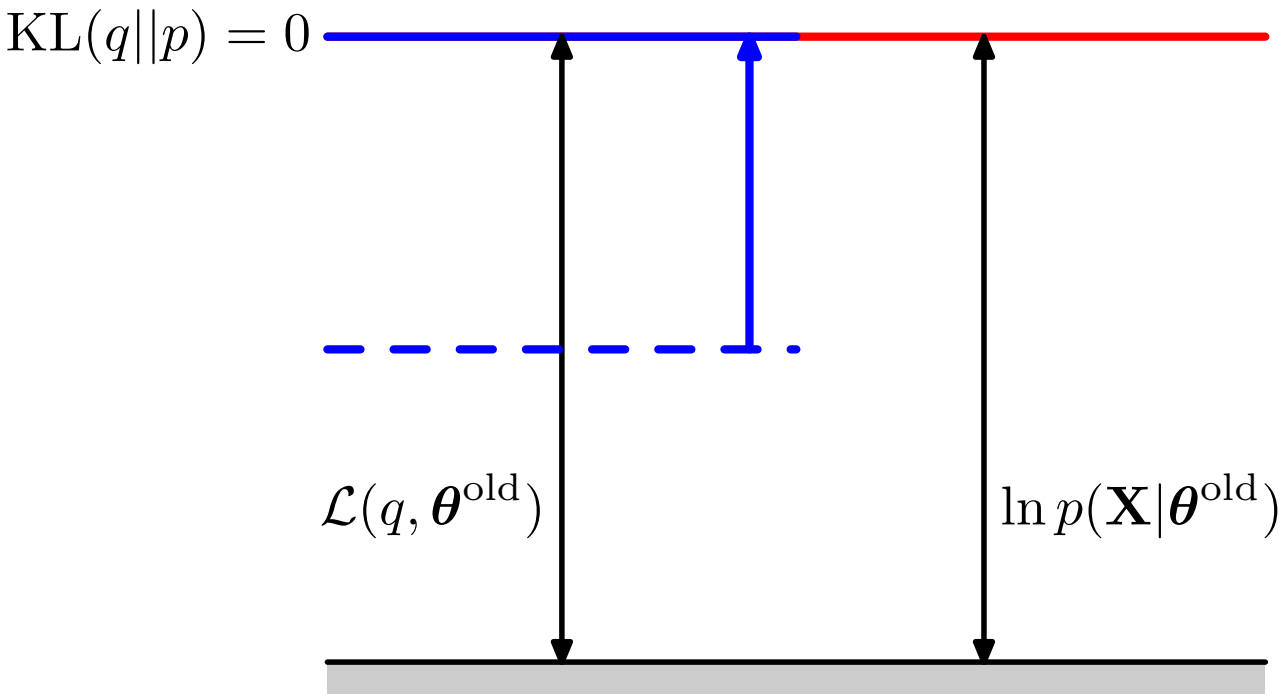
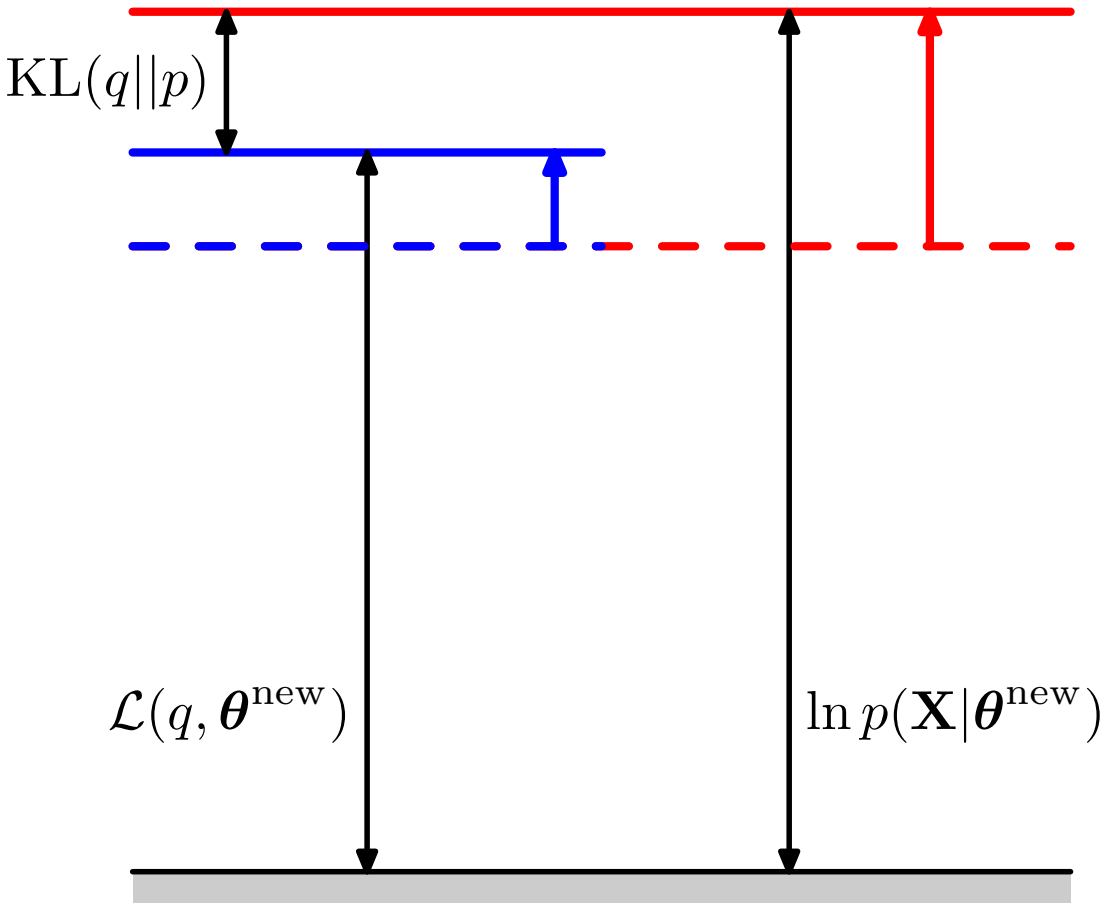


Figure: Chapter 9, Figure 12



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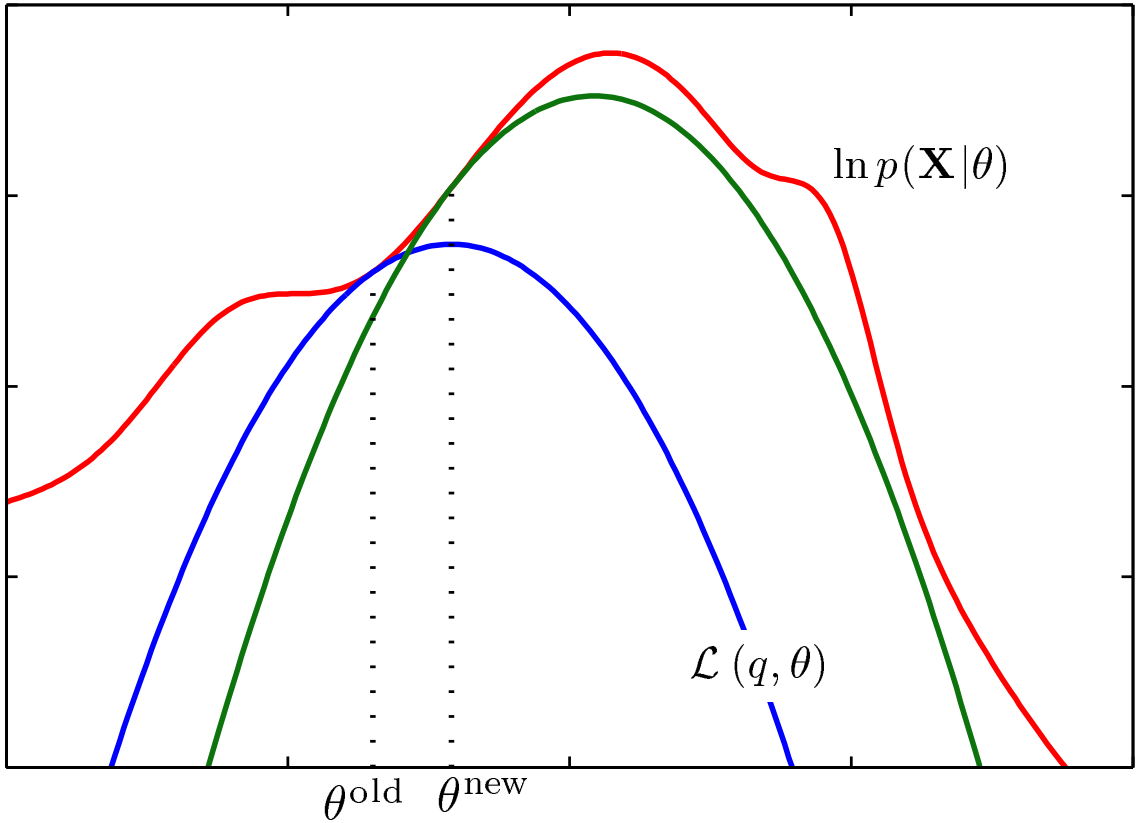

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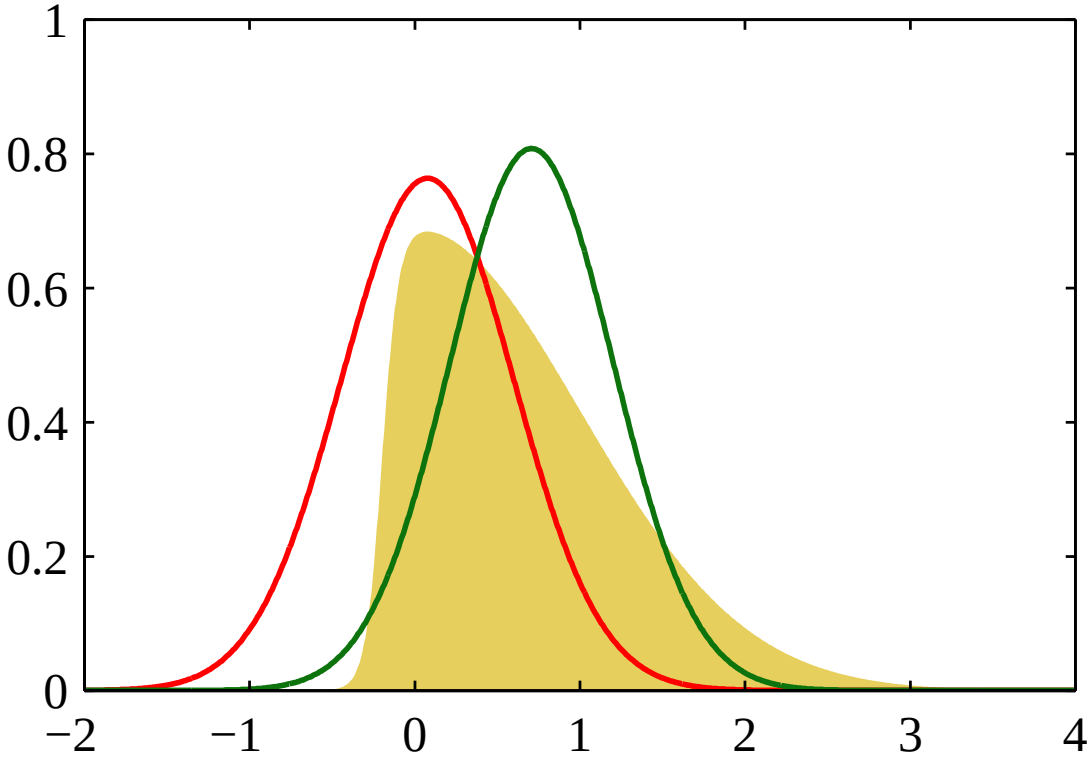


Figure: Chapter 10, Figure 1a

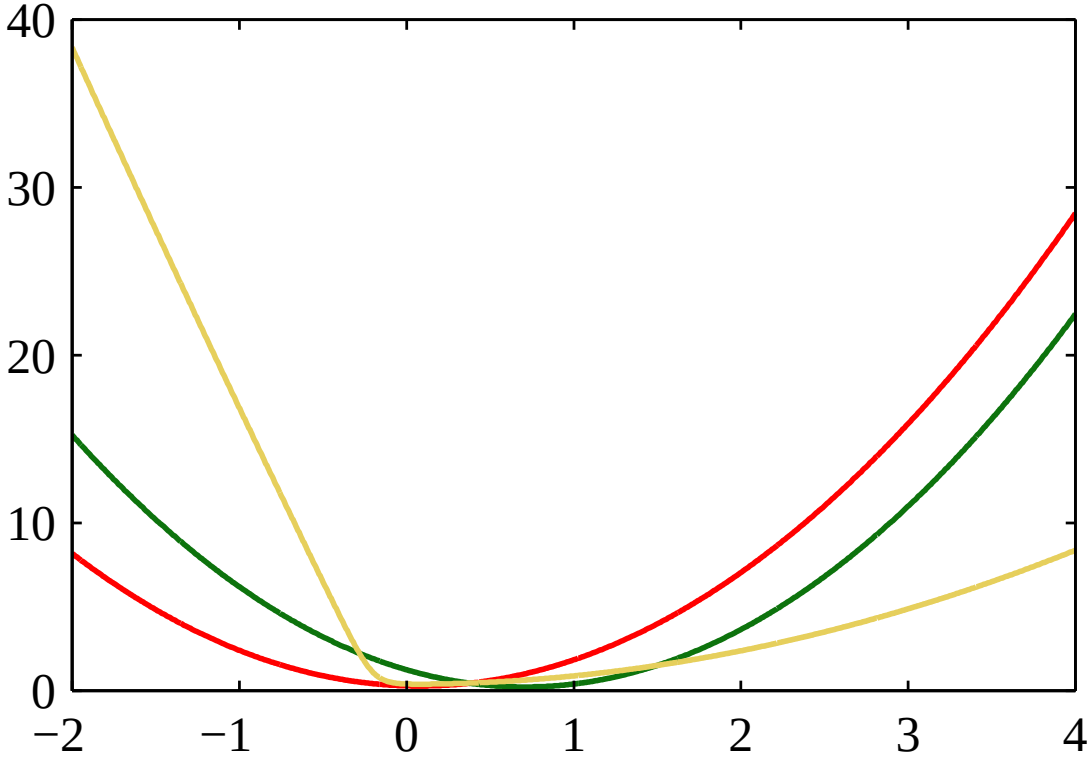


Figure: Chapter 10, Figure 1b

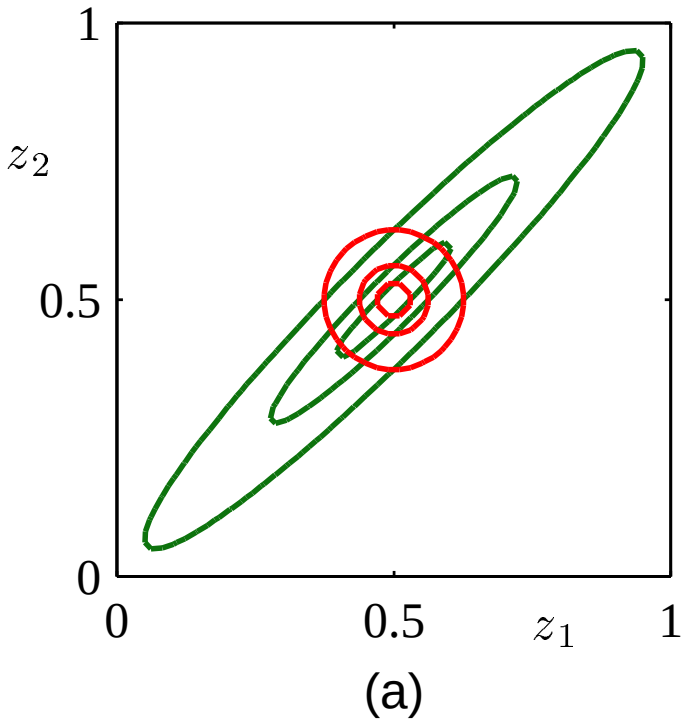


Figure: Chapter 10, Figure 2a

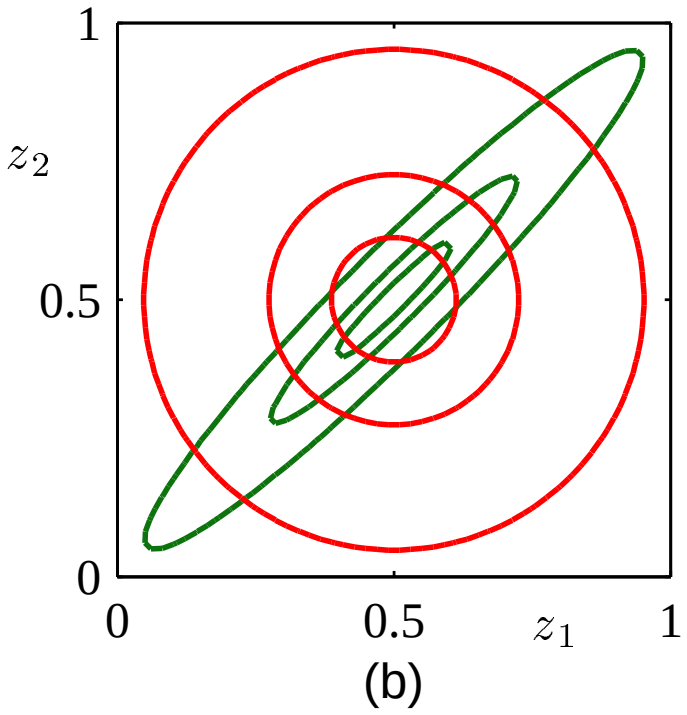


Figure: Chapter 10, Figure 2b

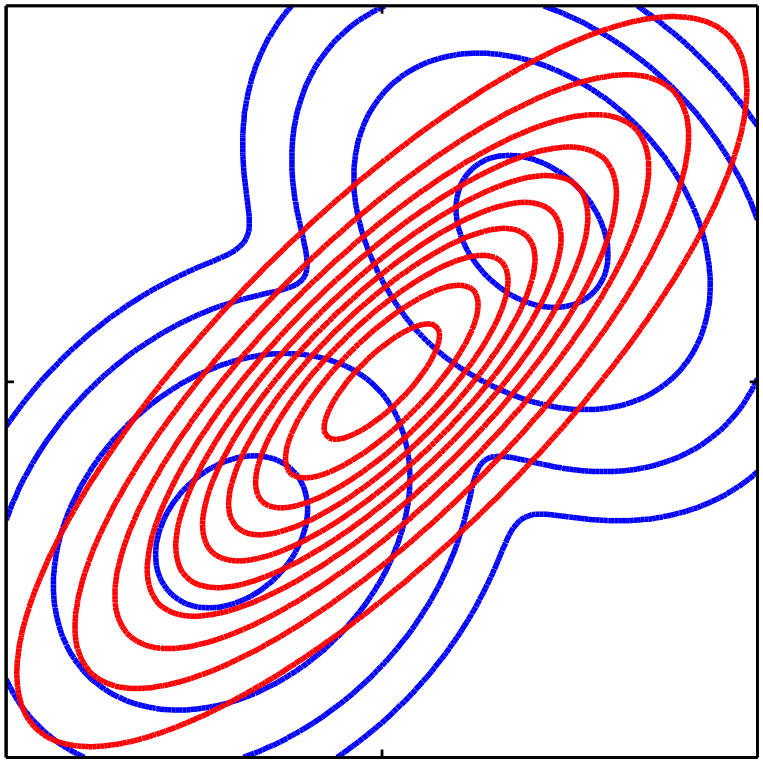


Figure: Chapter 10, Figure 3a

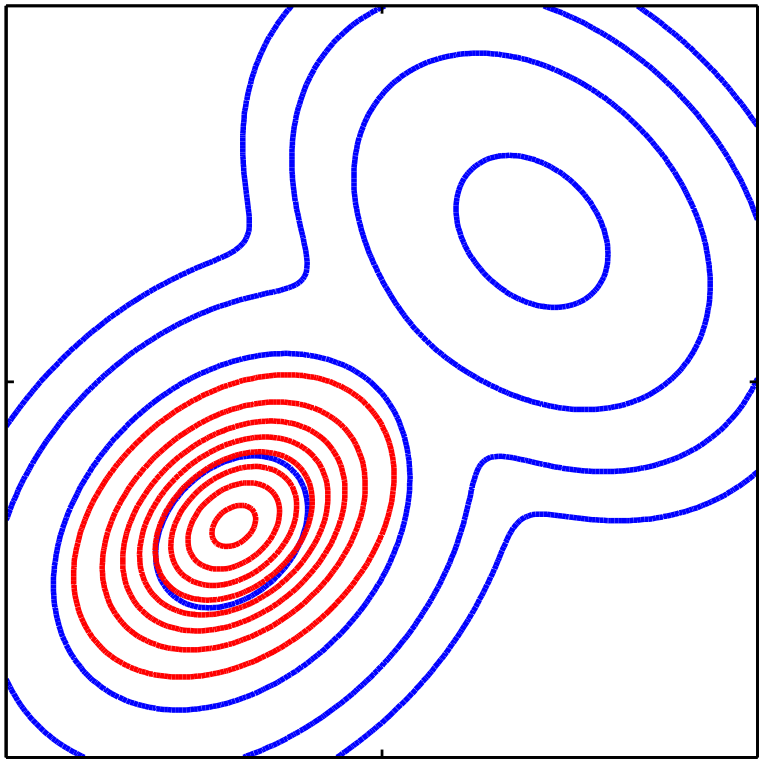
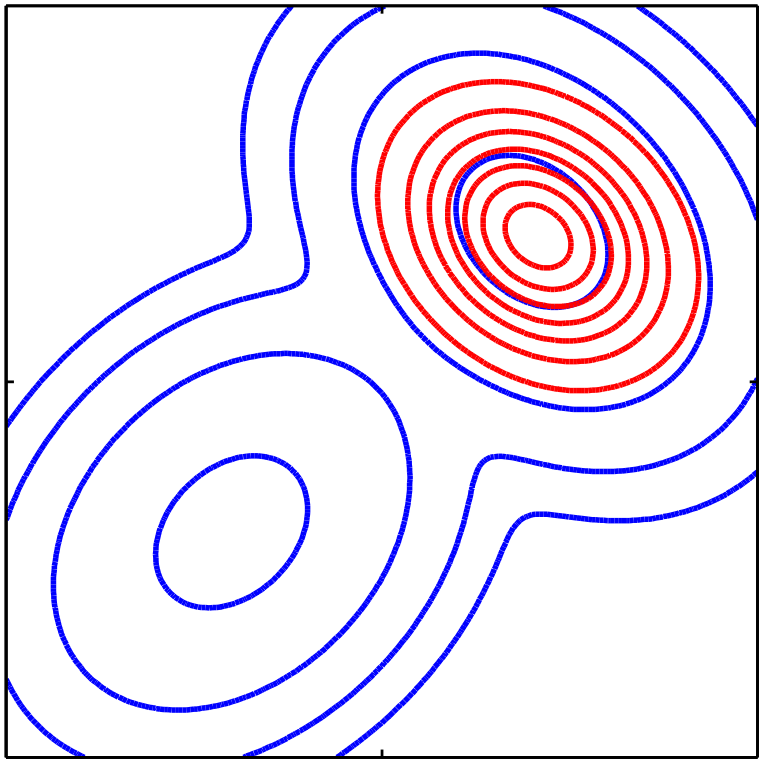


Figure: Chapter 10, Figure 3b



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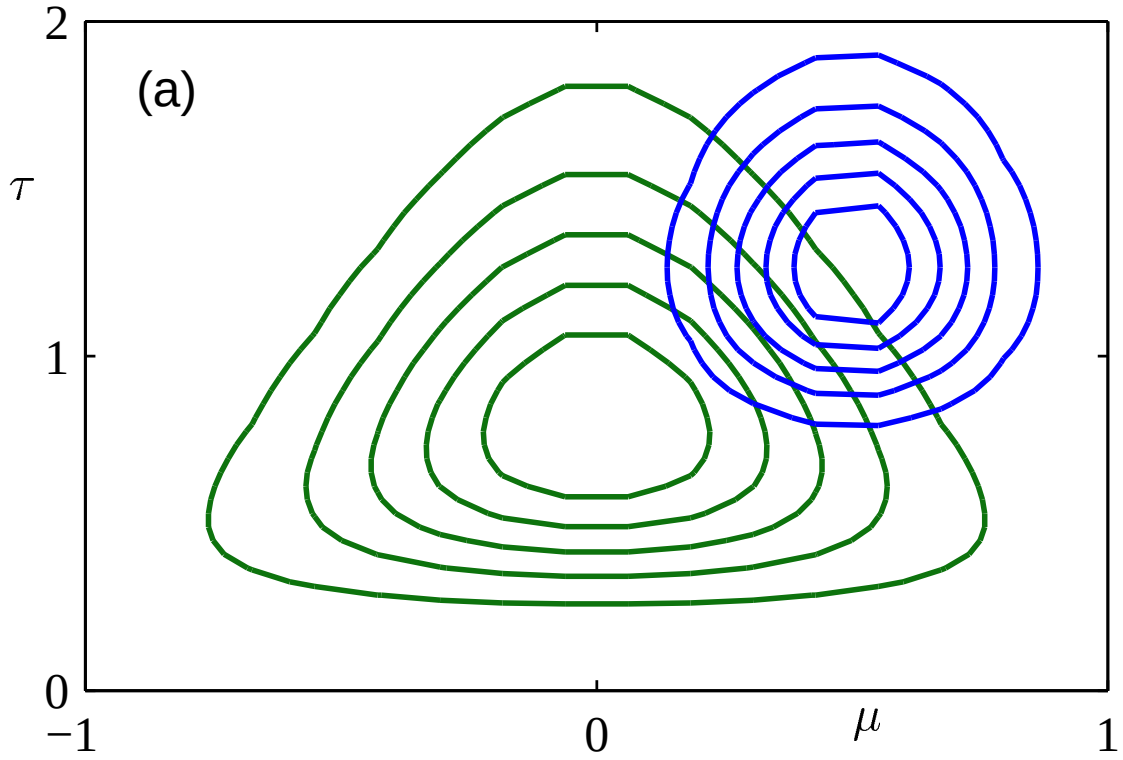


Figure: Chapter 10, Figure 4a

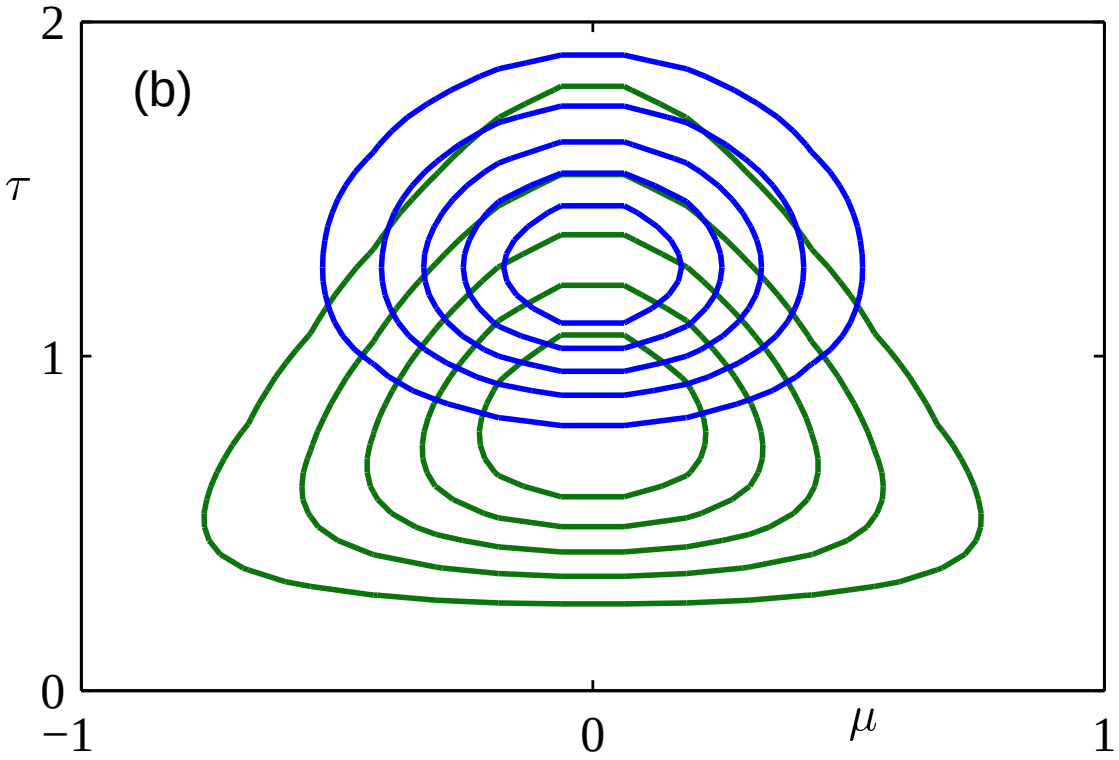
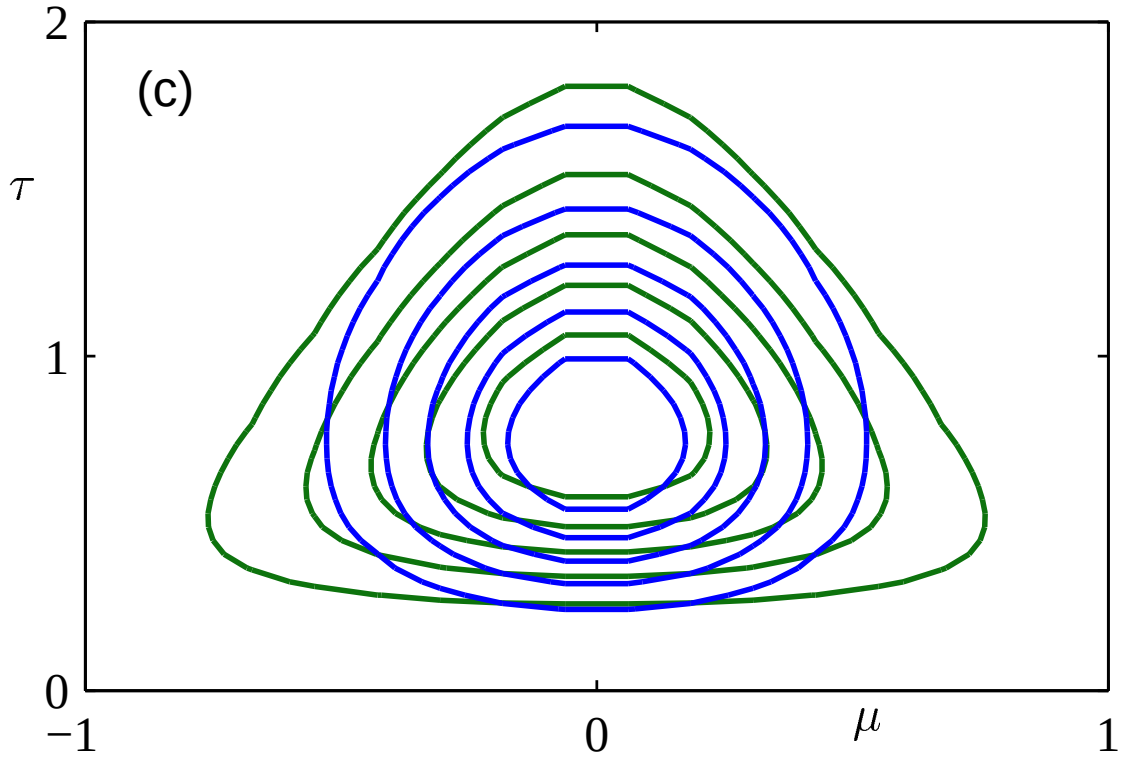


Figure: Chapter 10, Figure 4b



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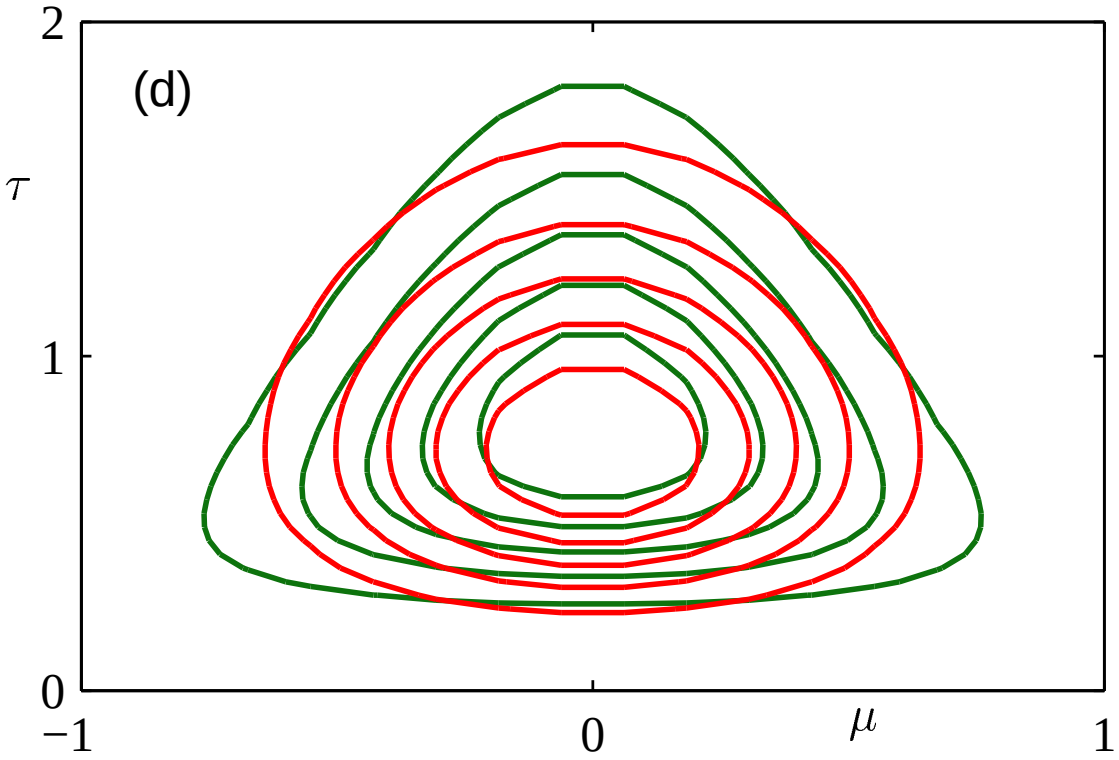
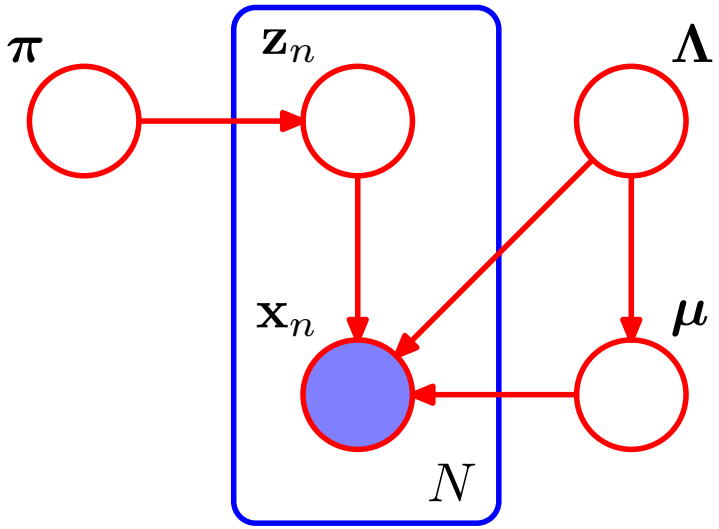


Figure: Chapter 10, Figure 4d



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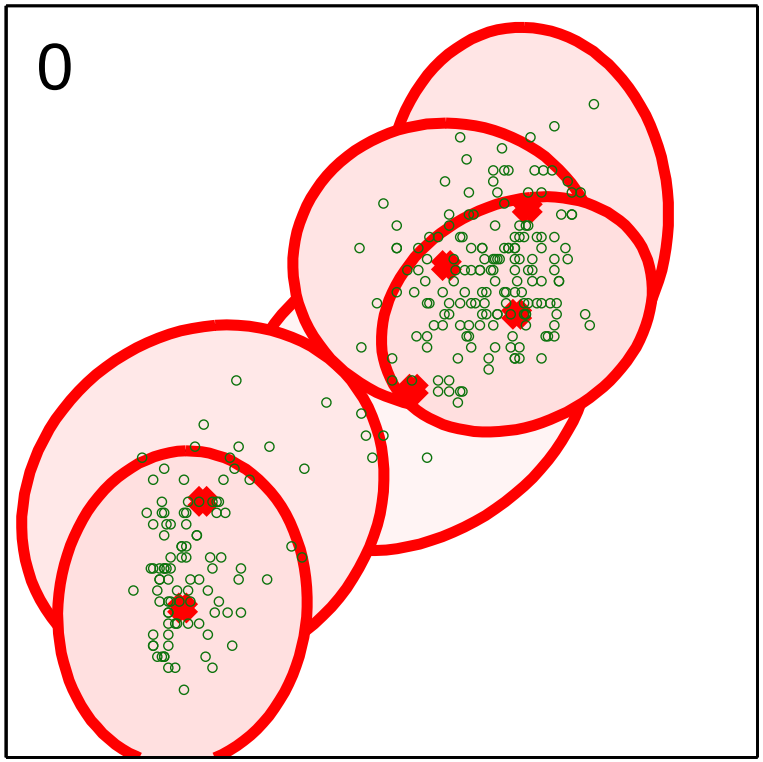
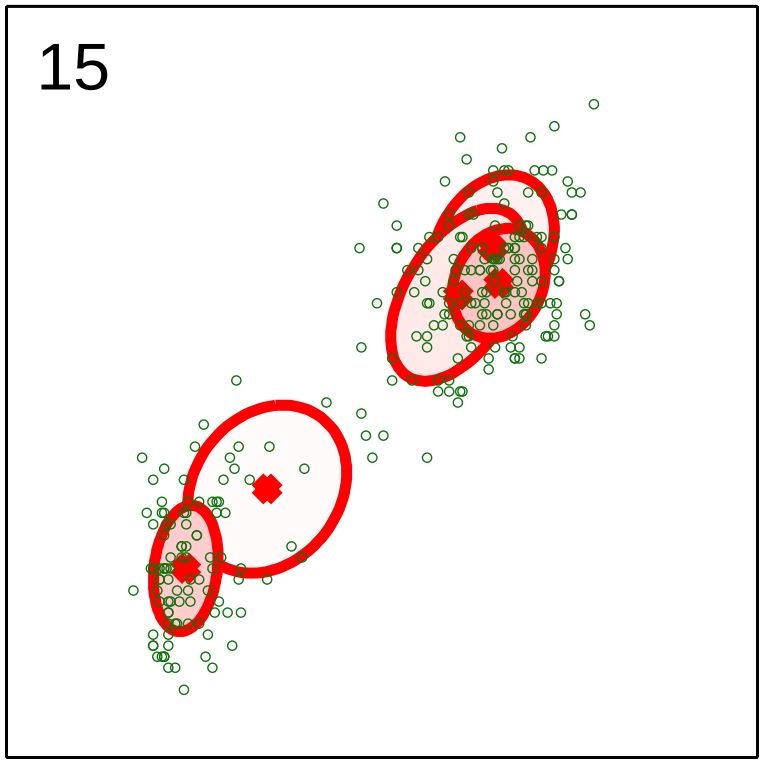


Figure: Chapter 10, Figure 6a



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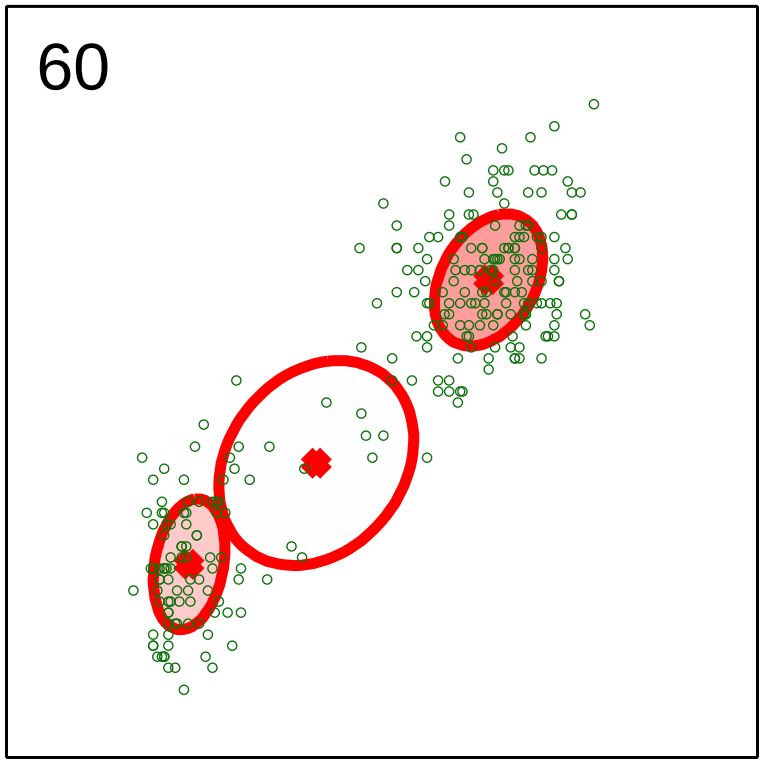
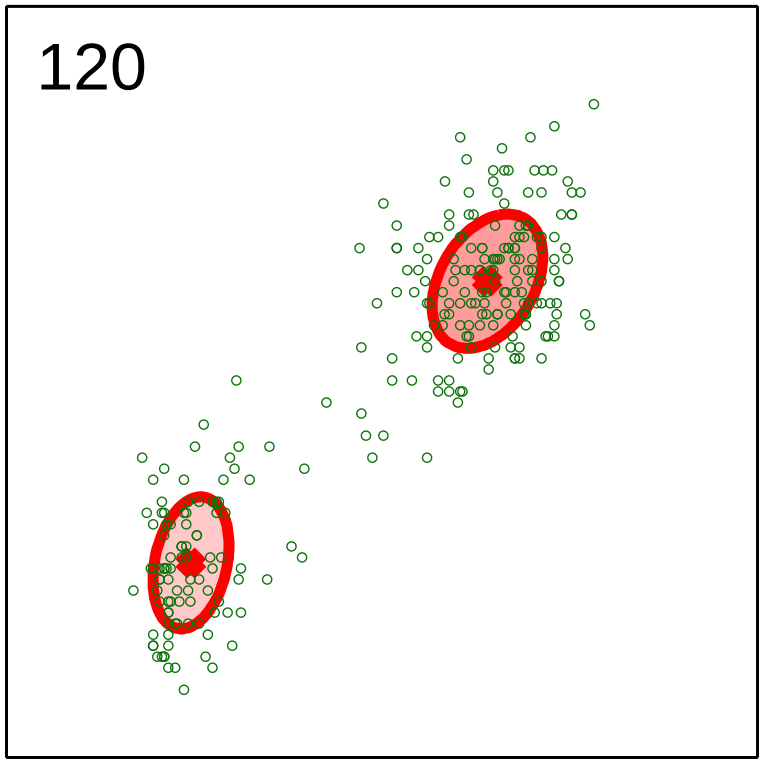


Figure: Chapter 10, Figure 6c



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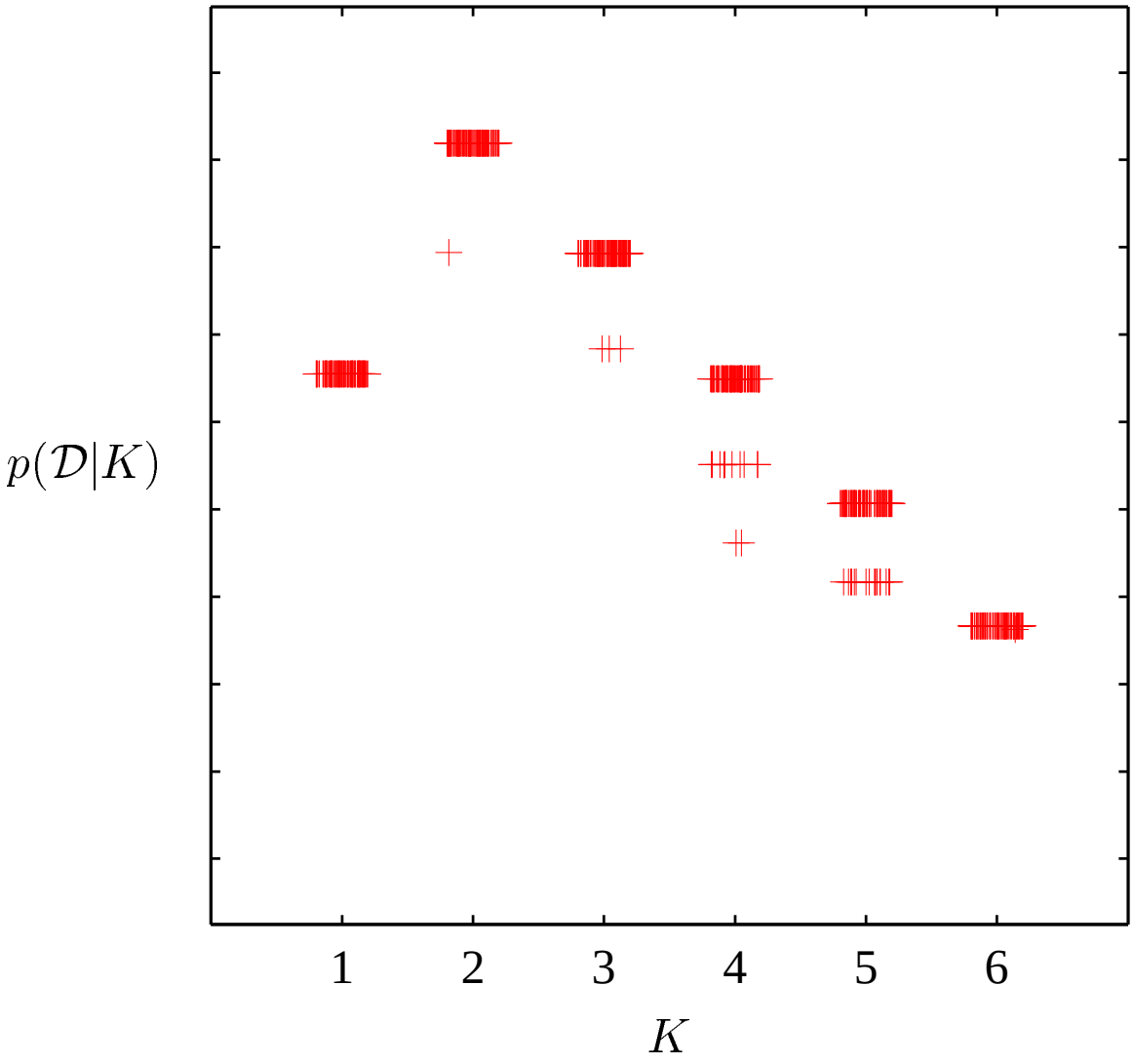


Figure: Chapter 10, Figure 7

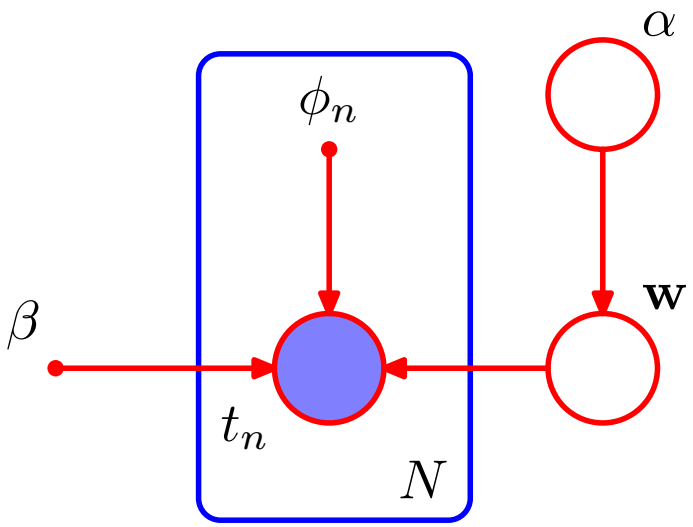


Figure: Chapter 10, Figure 8

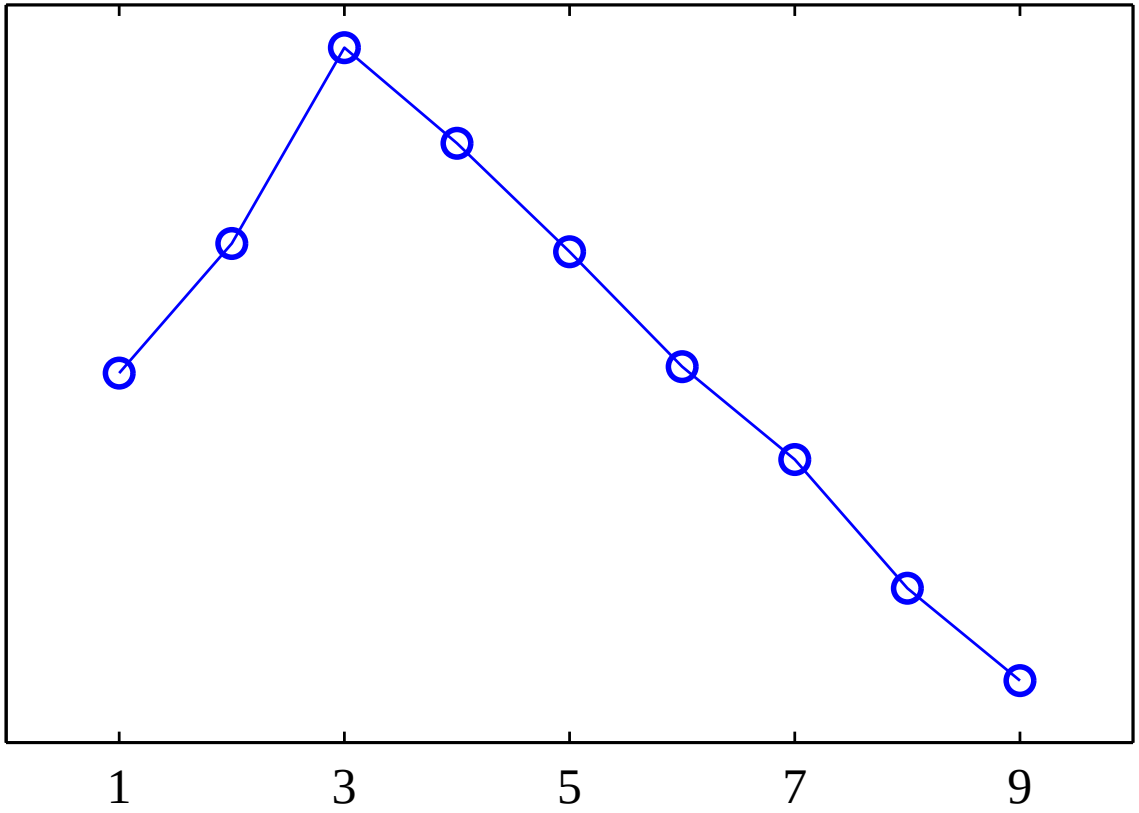


Figure: Chapter 10, Figure 9

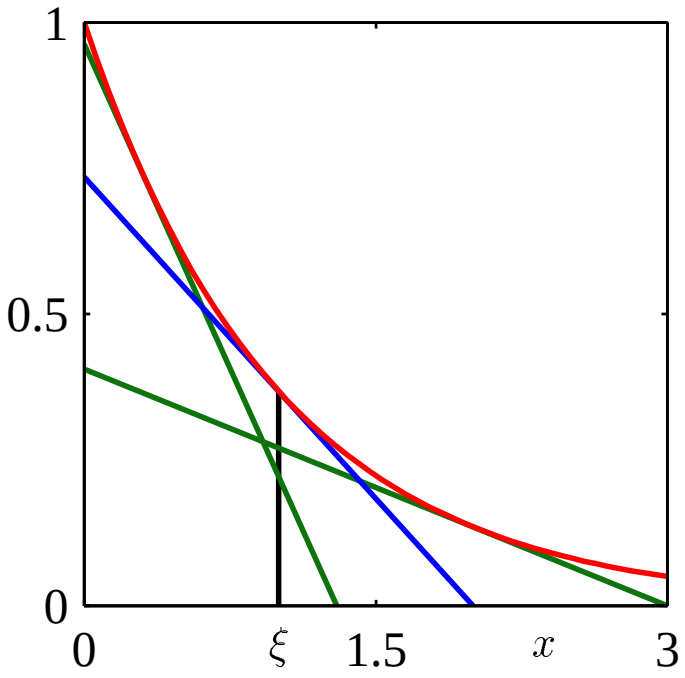


Figure: Chapter 10, Figure 10a

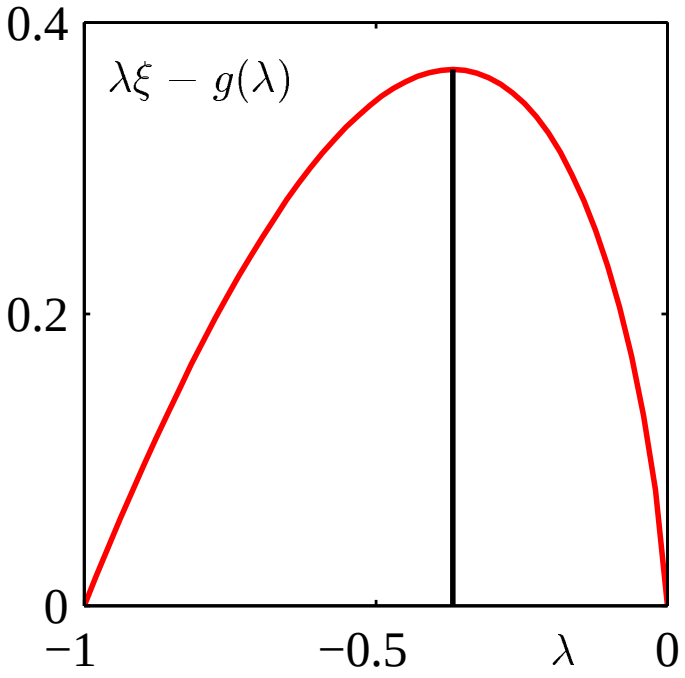


Figure: Chapter 10, Figure 10b

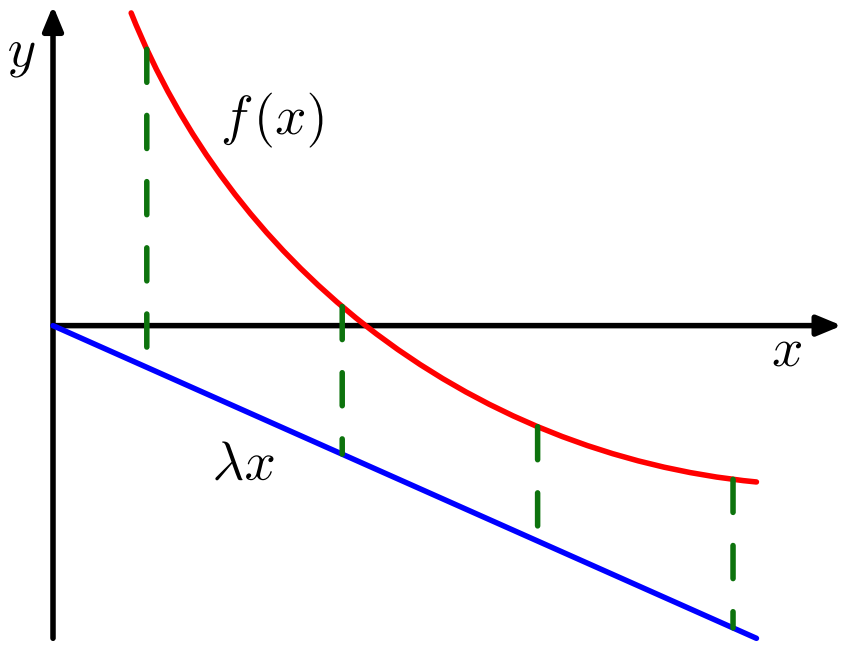


Figure: Chapter 10, Figure 11a

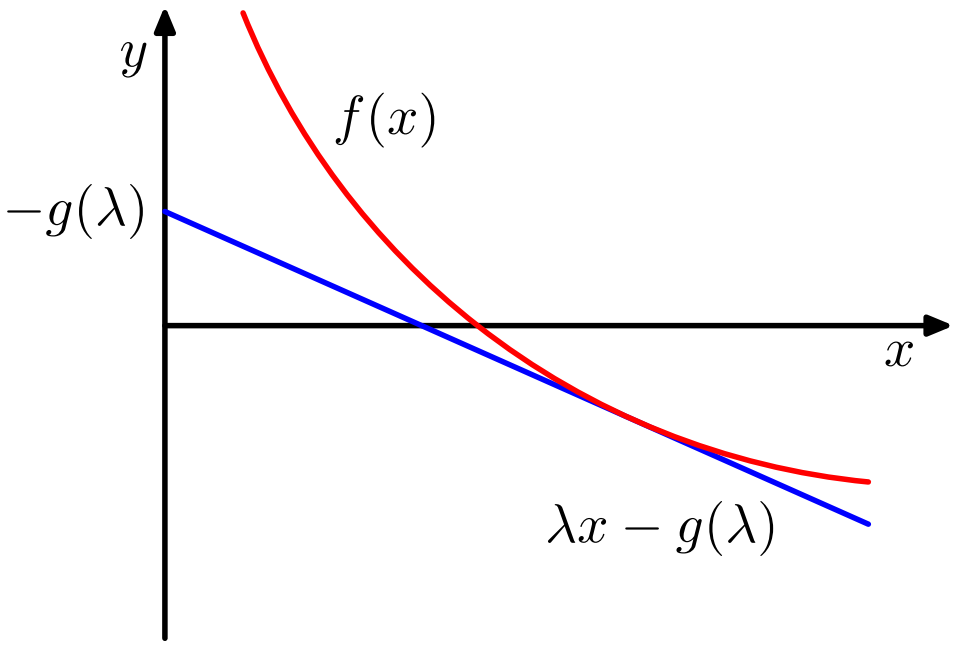


Figure: Chapter 10, Figure 11b

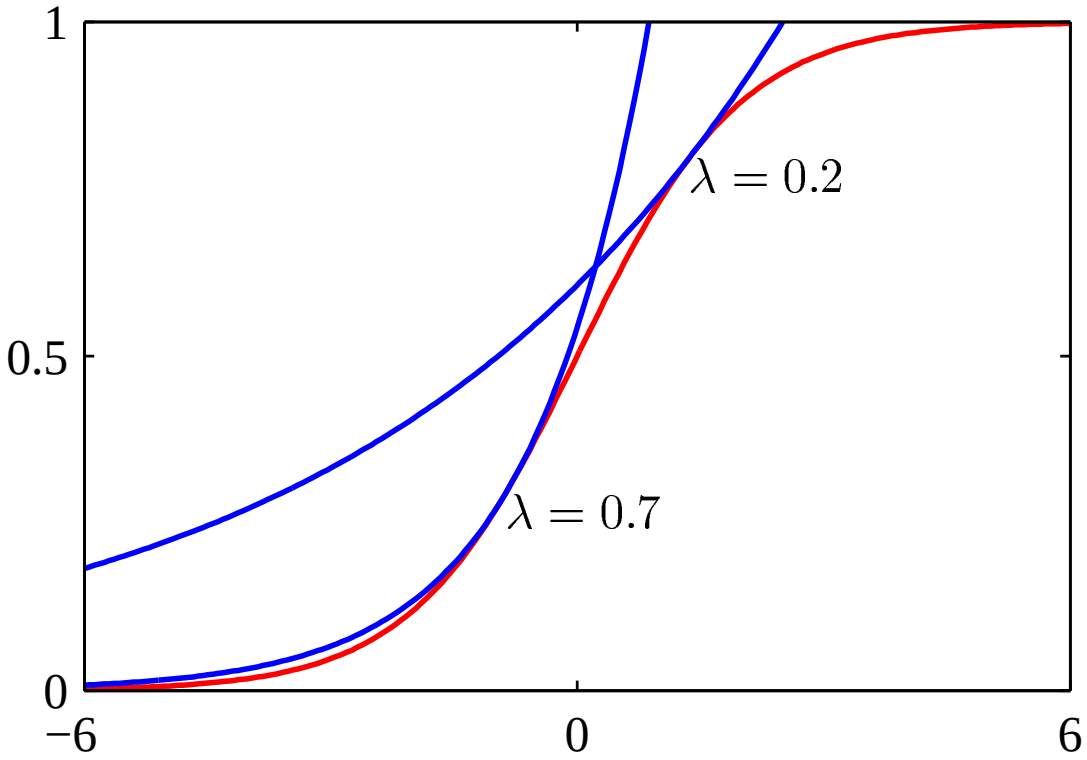
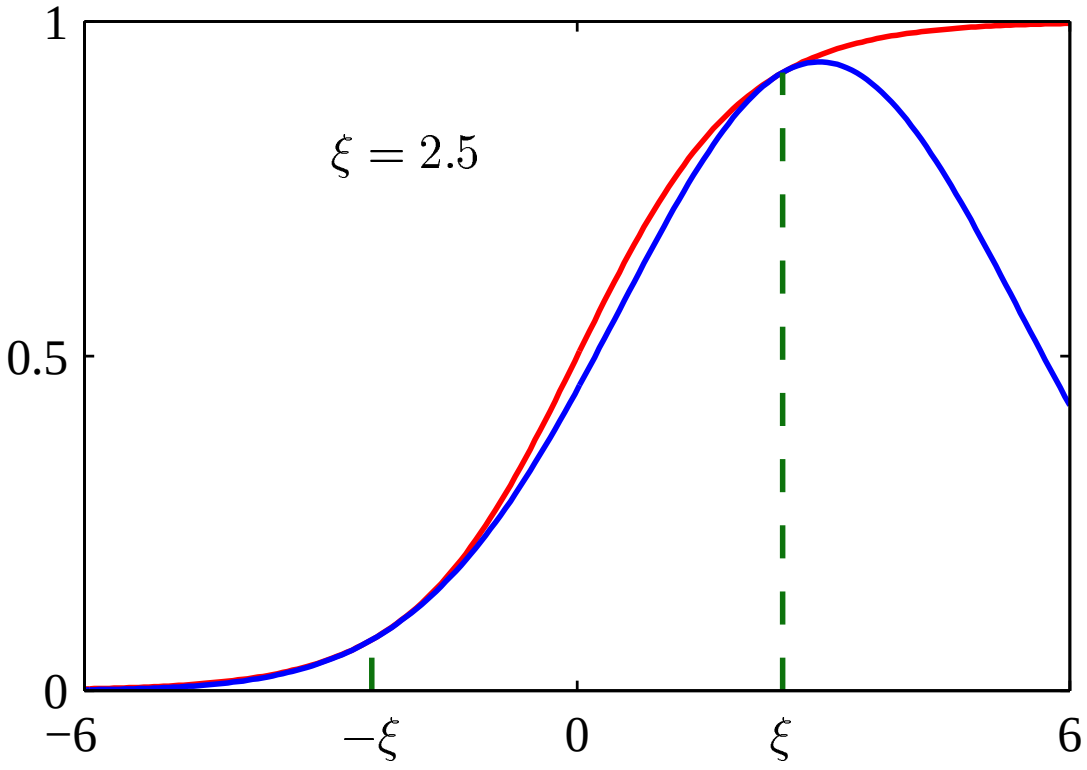


Figure: Chapter 10, Figure 12a



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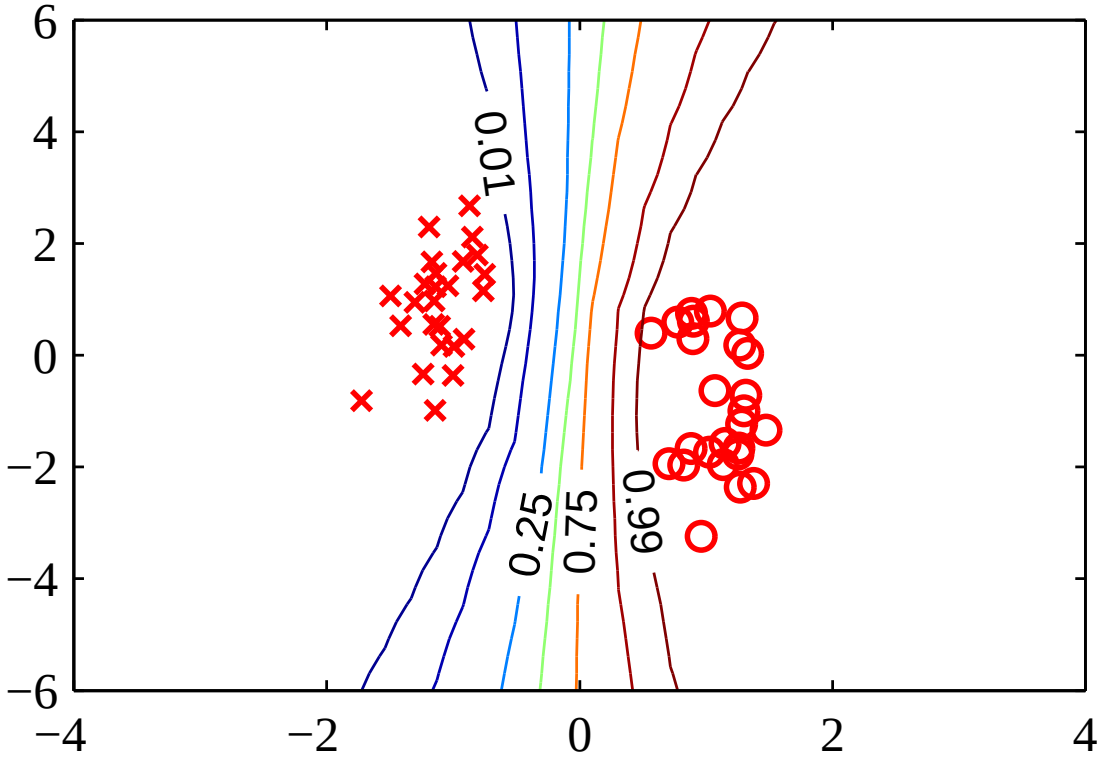


Figure: Chapter 10, Figure 13a

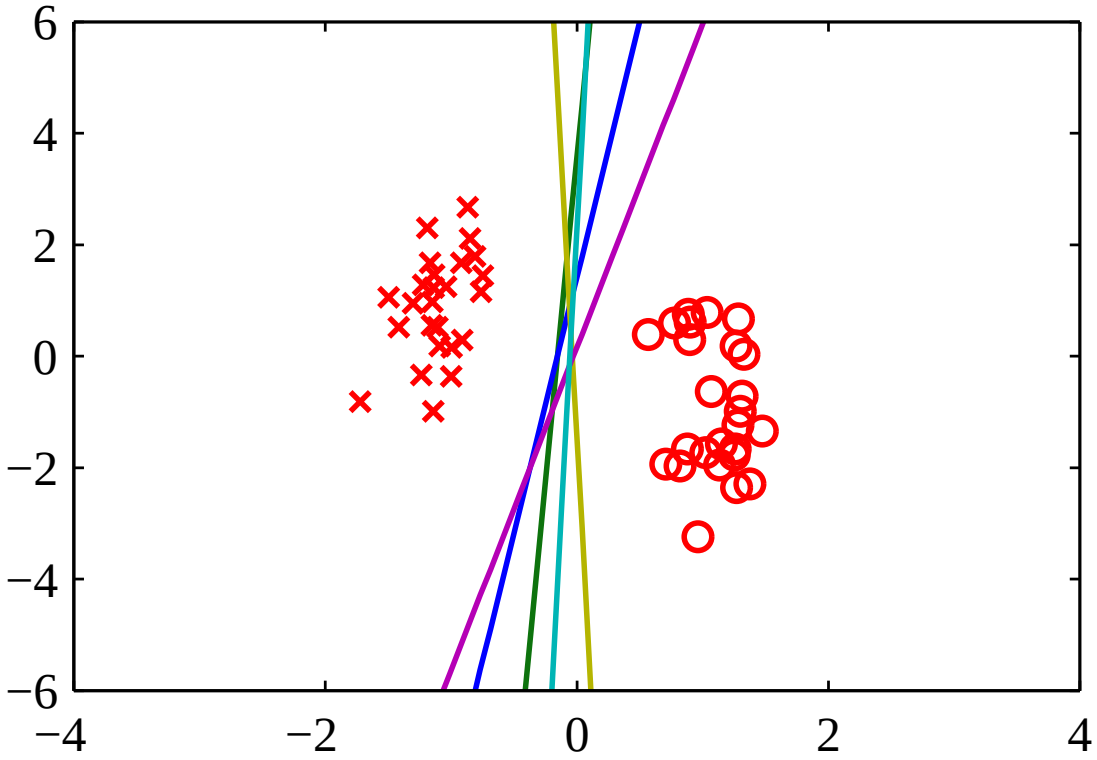


Figure: Chapter 10, Figure 13b

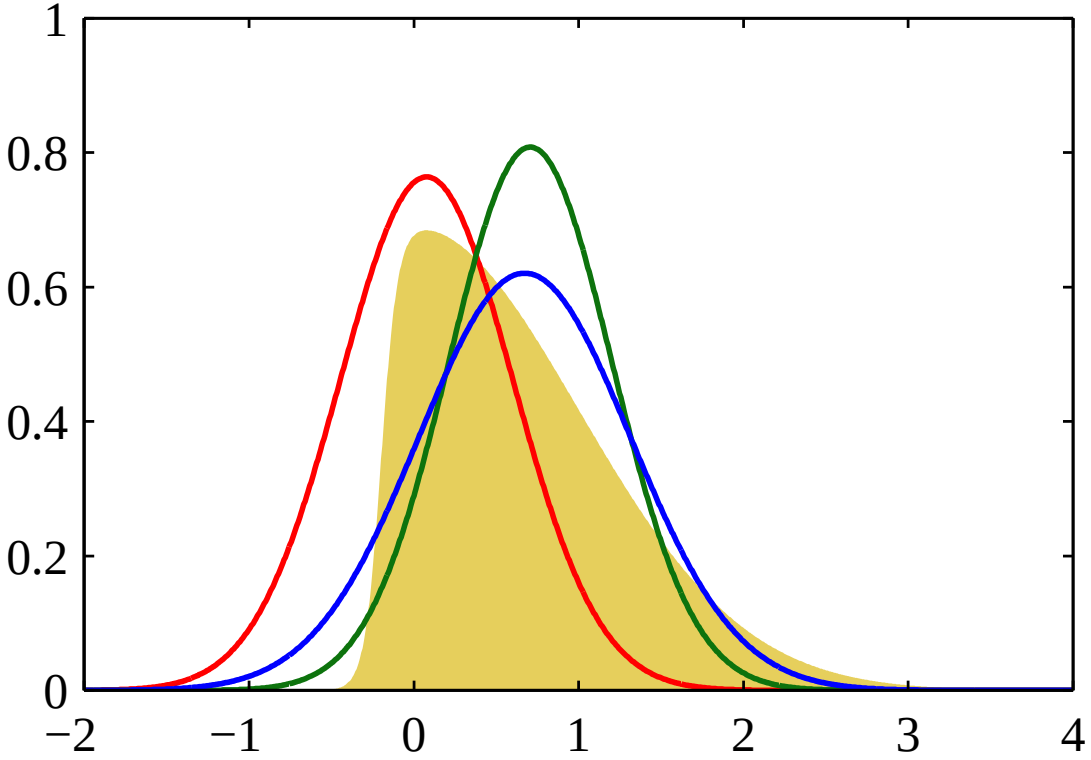


Figure: Chapter 10, Figure 14a

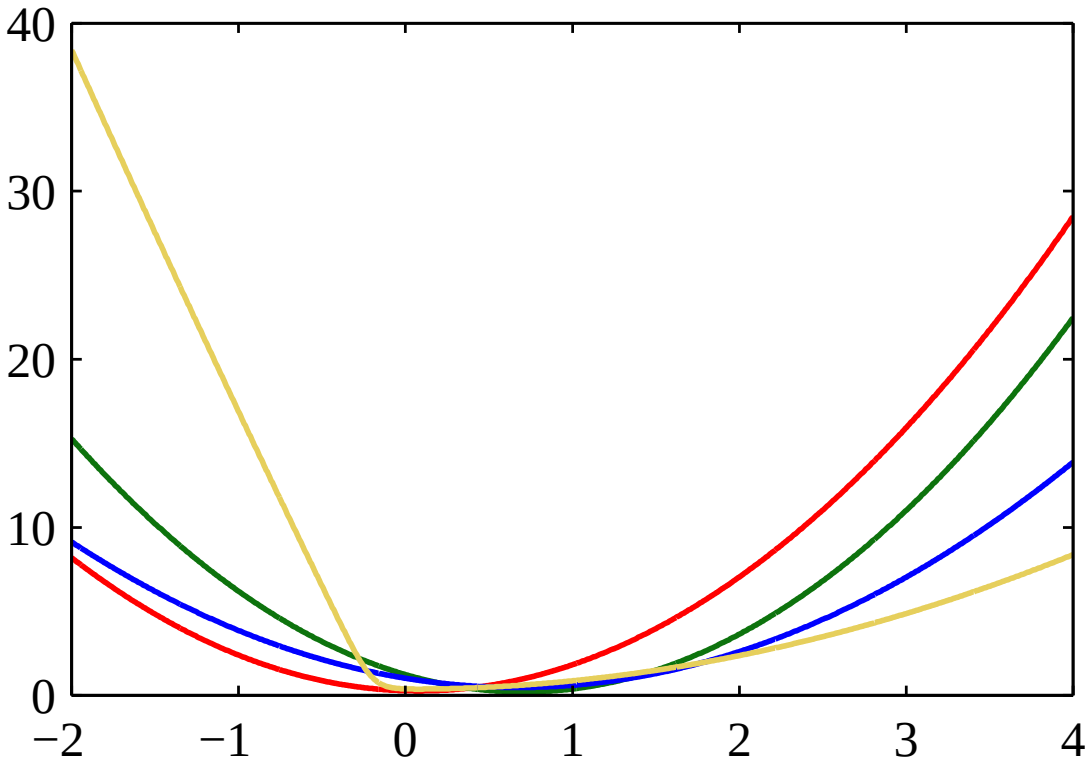


Figure: Chapter 10, Figure 14b

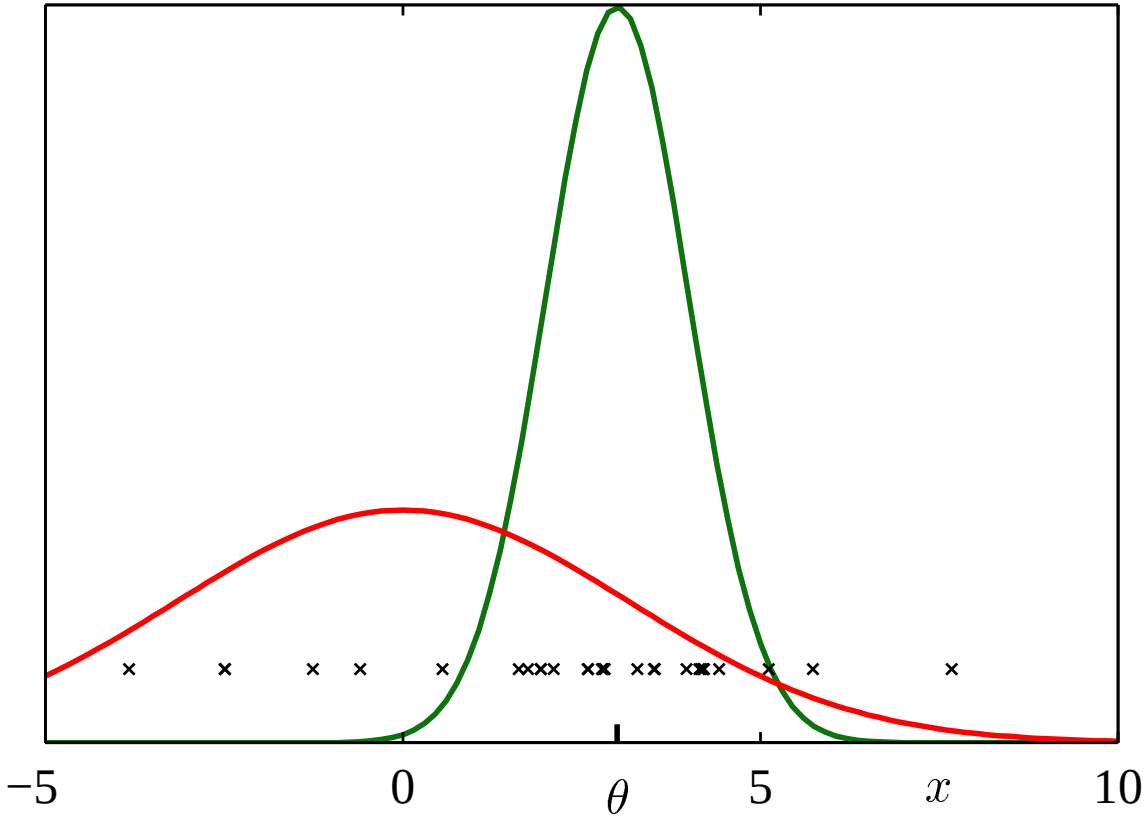


Figure: Chapter 10, Figure 15

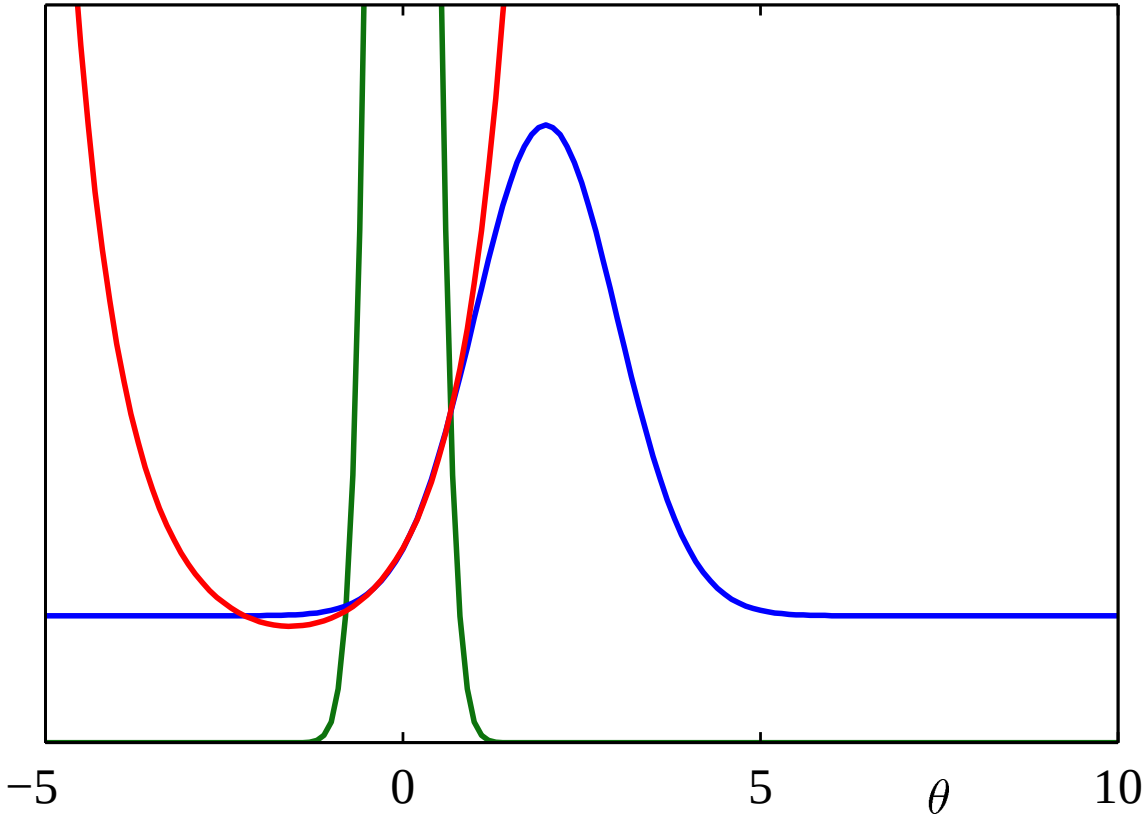
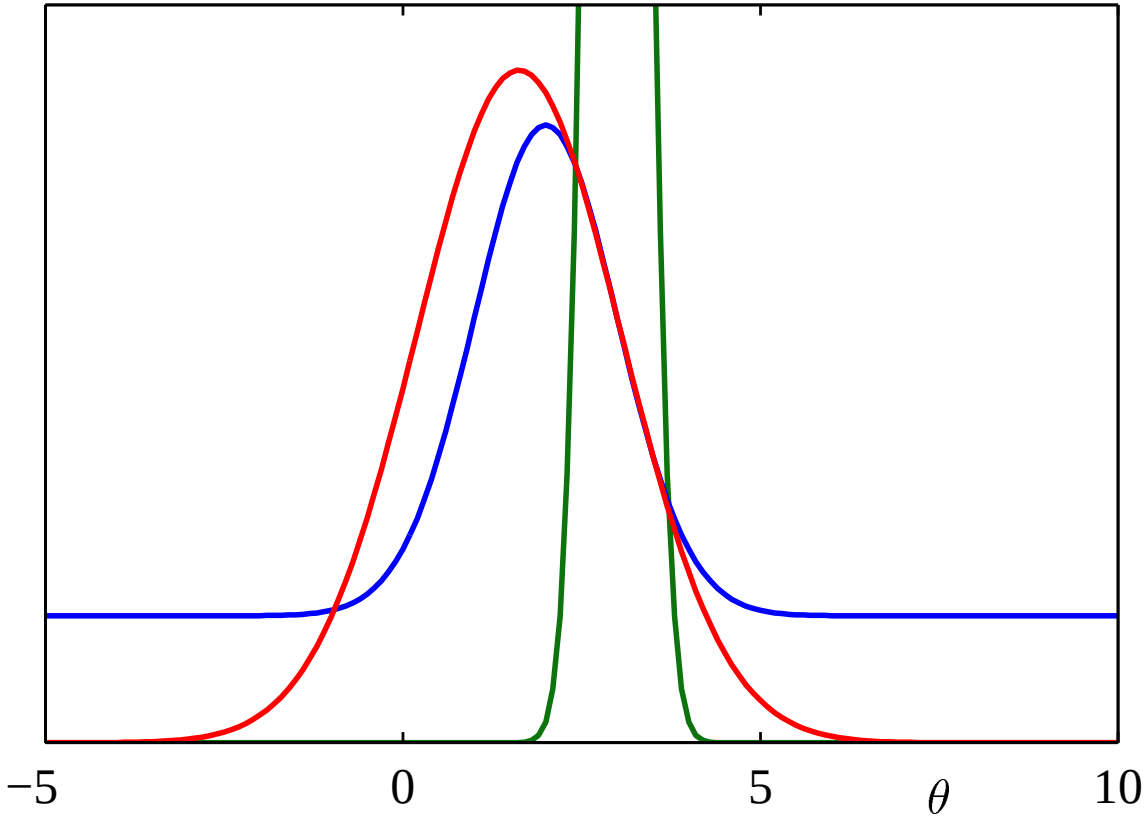


Figure: Chapter 10, Figure 16a



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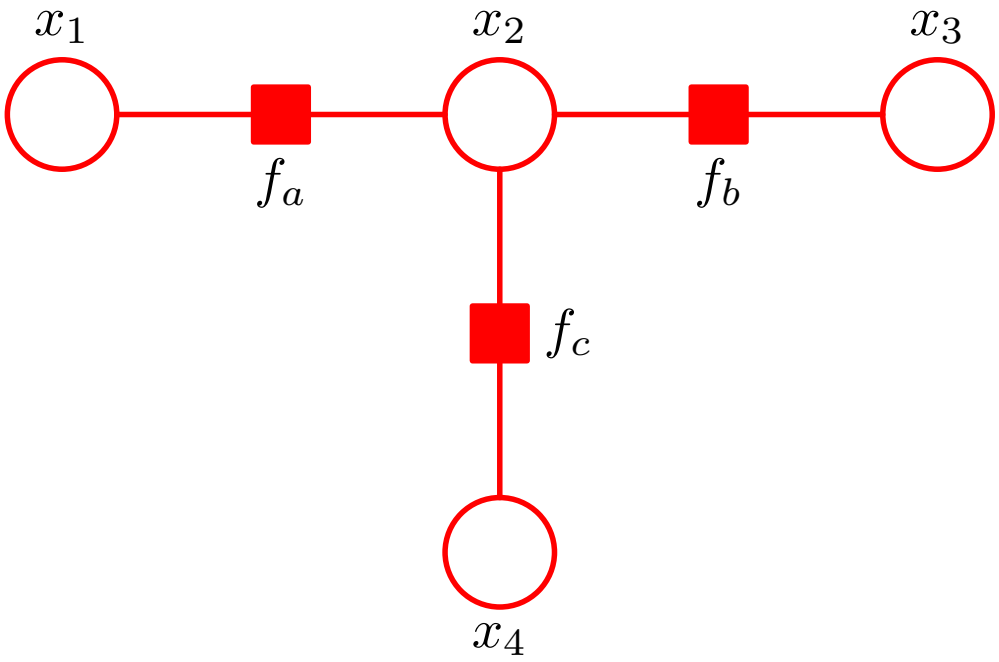

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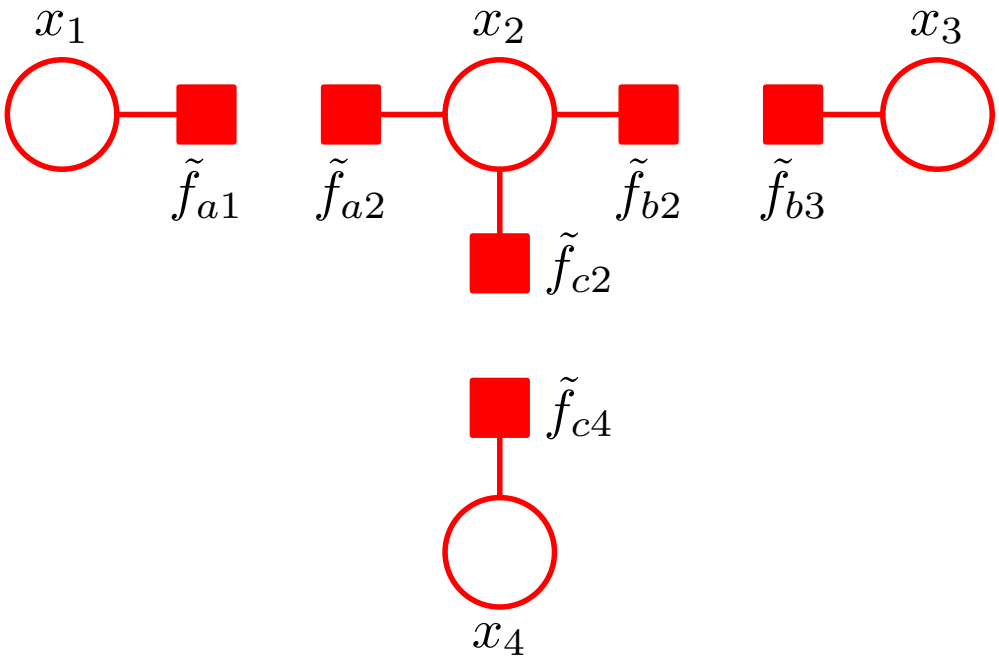

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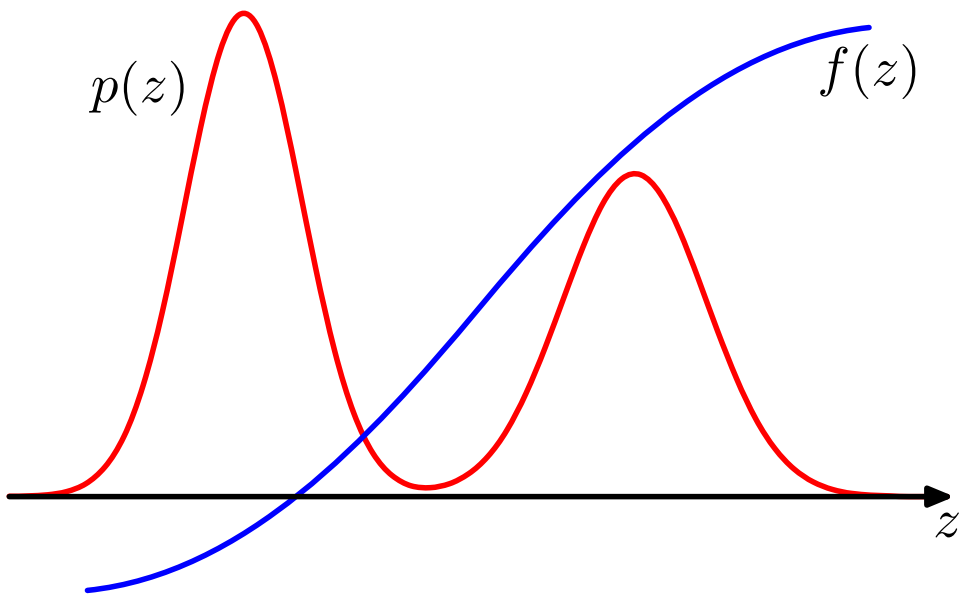

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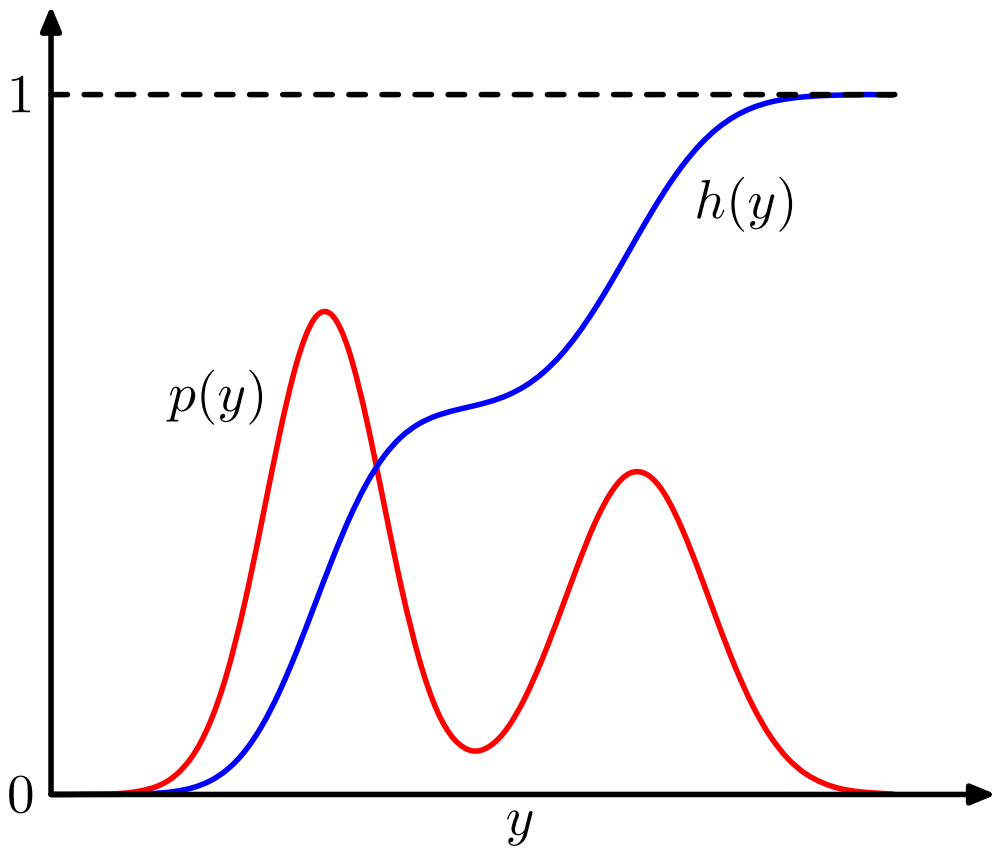

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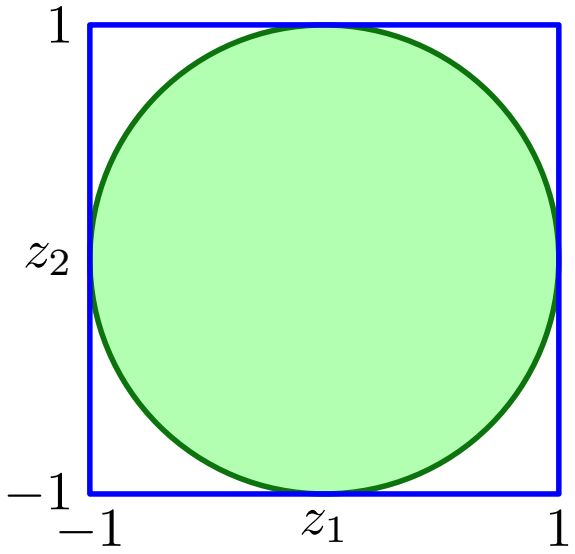

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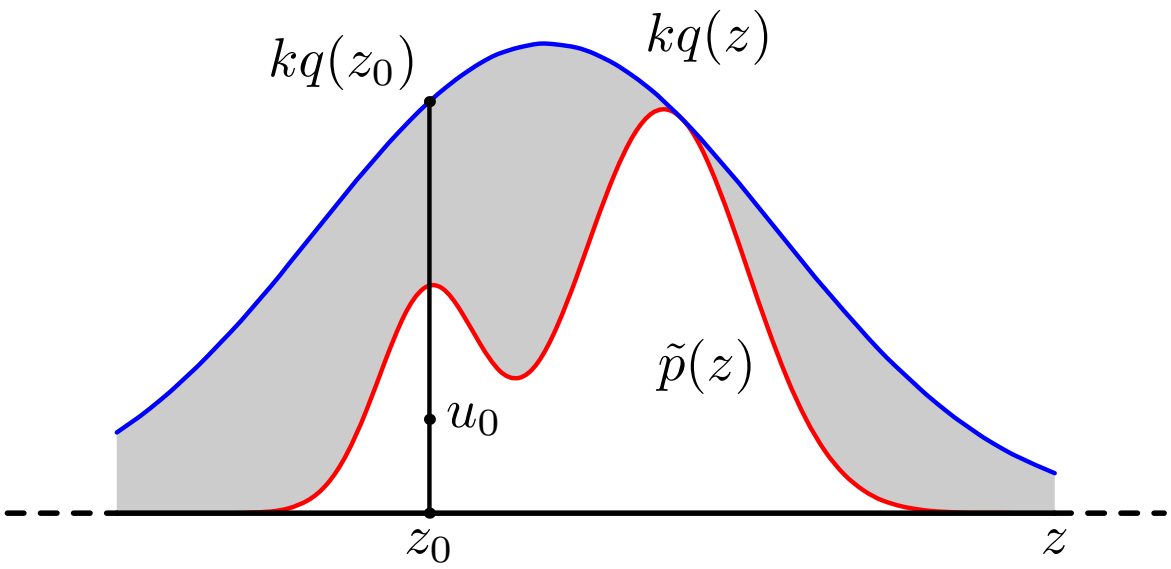

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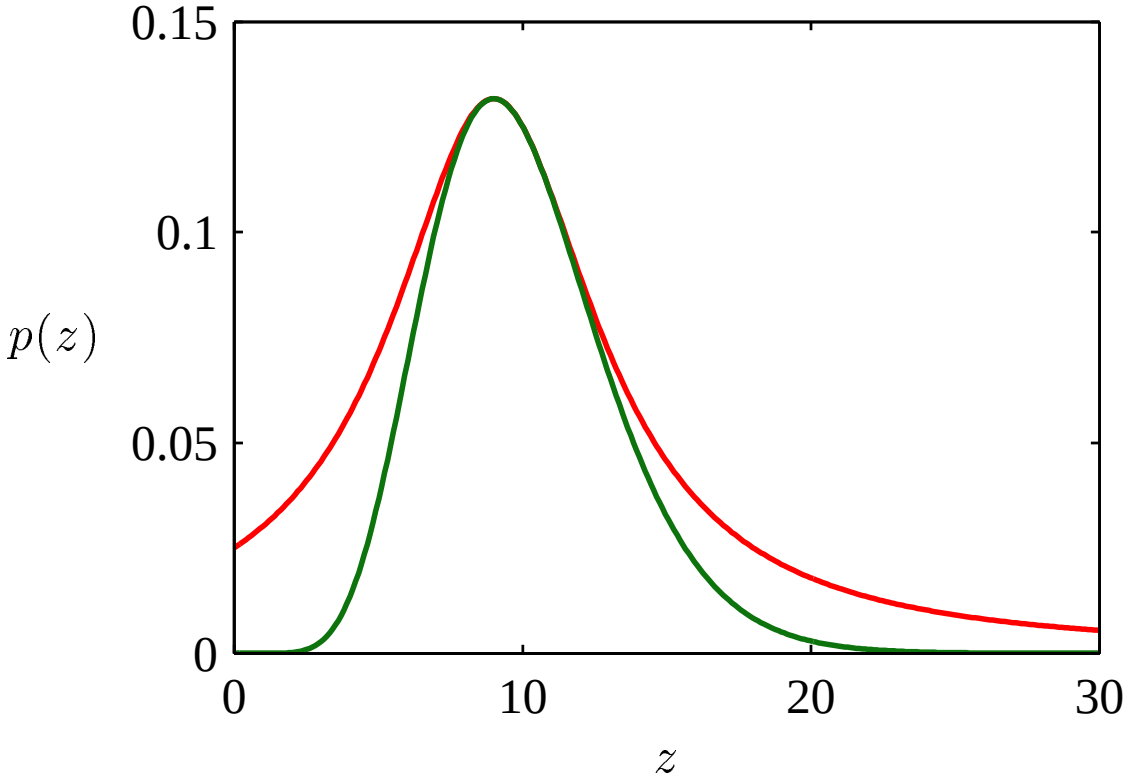

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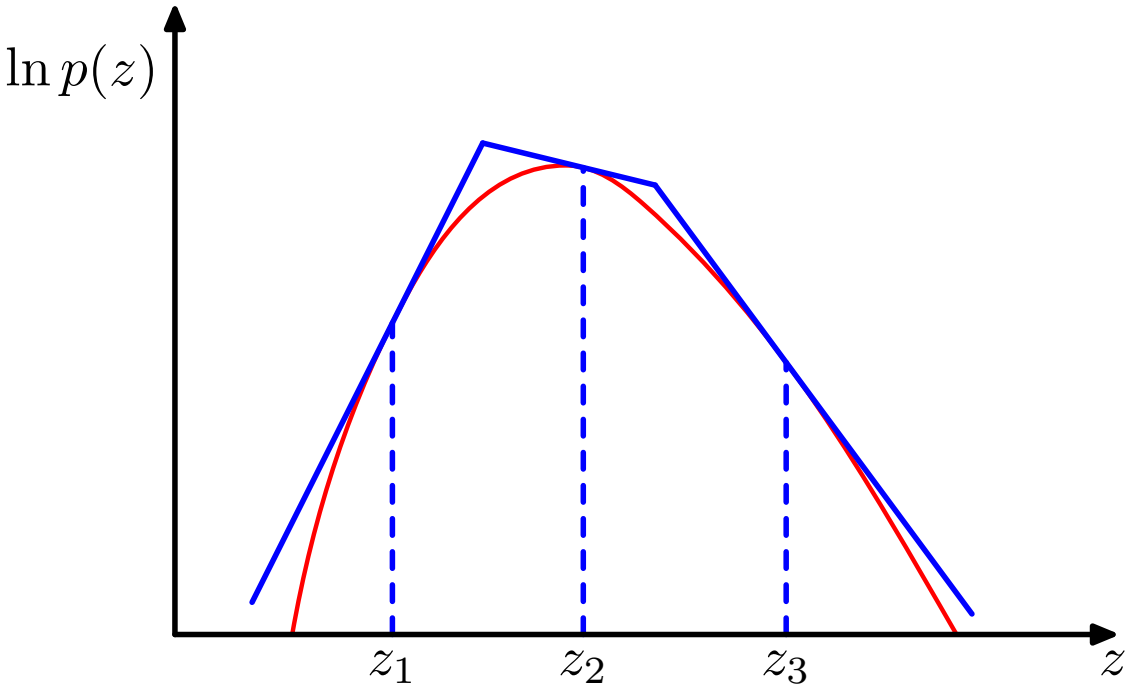

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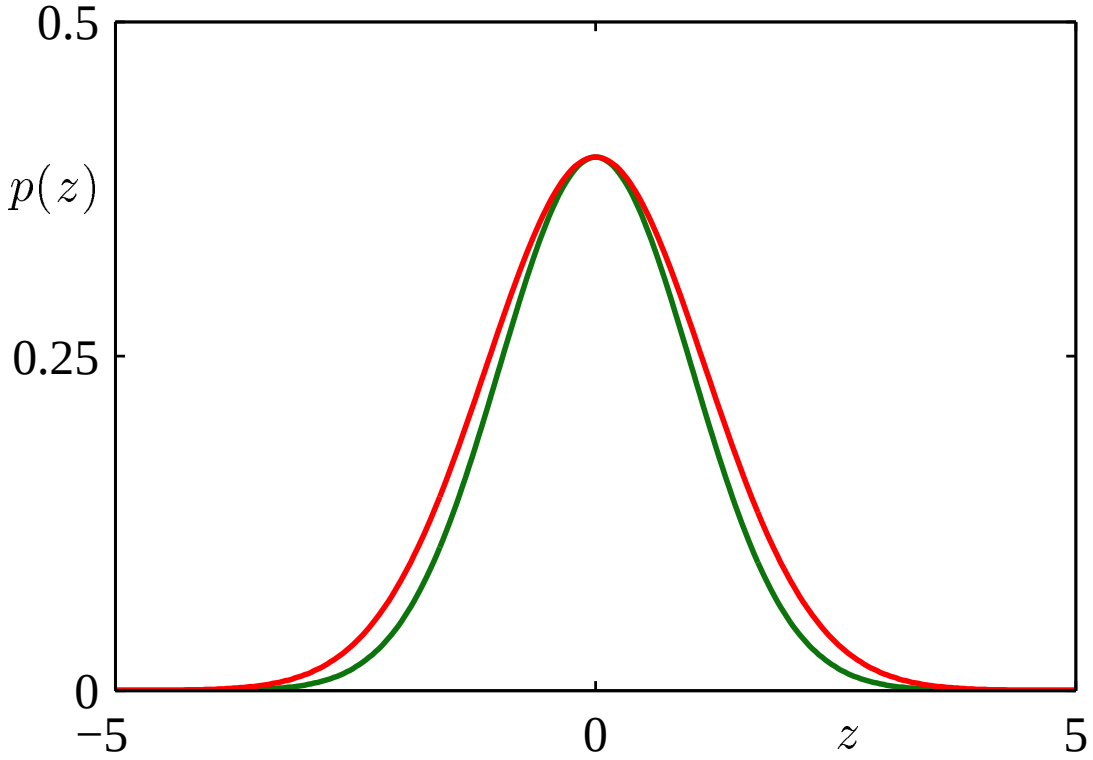

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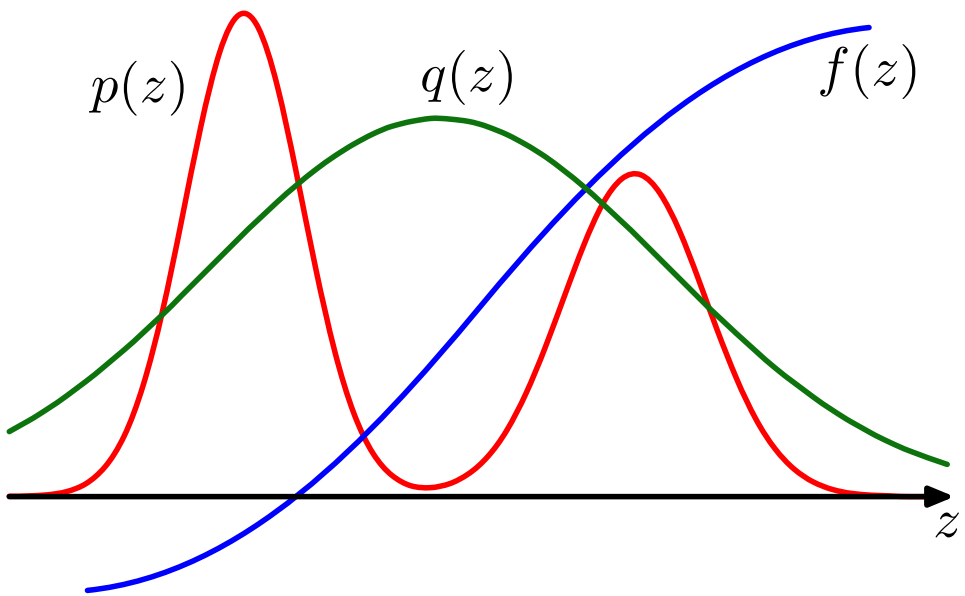

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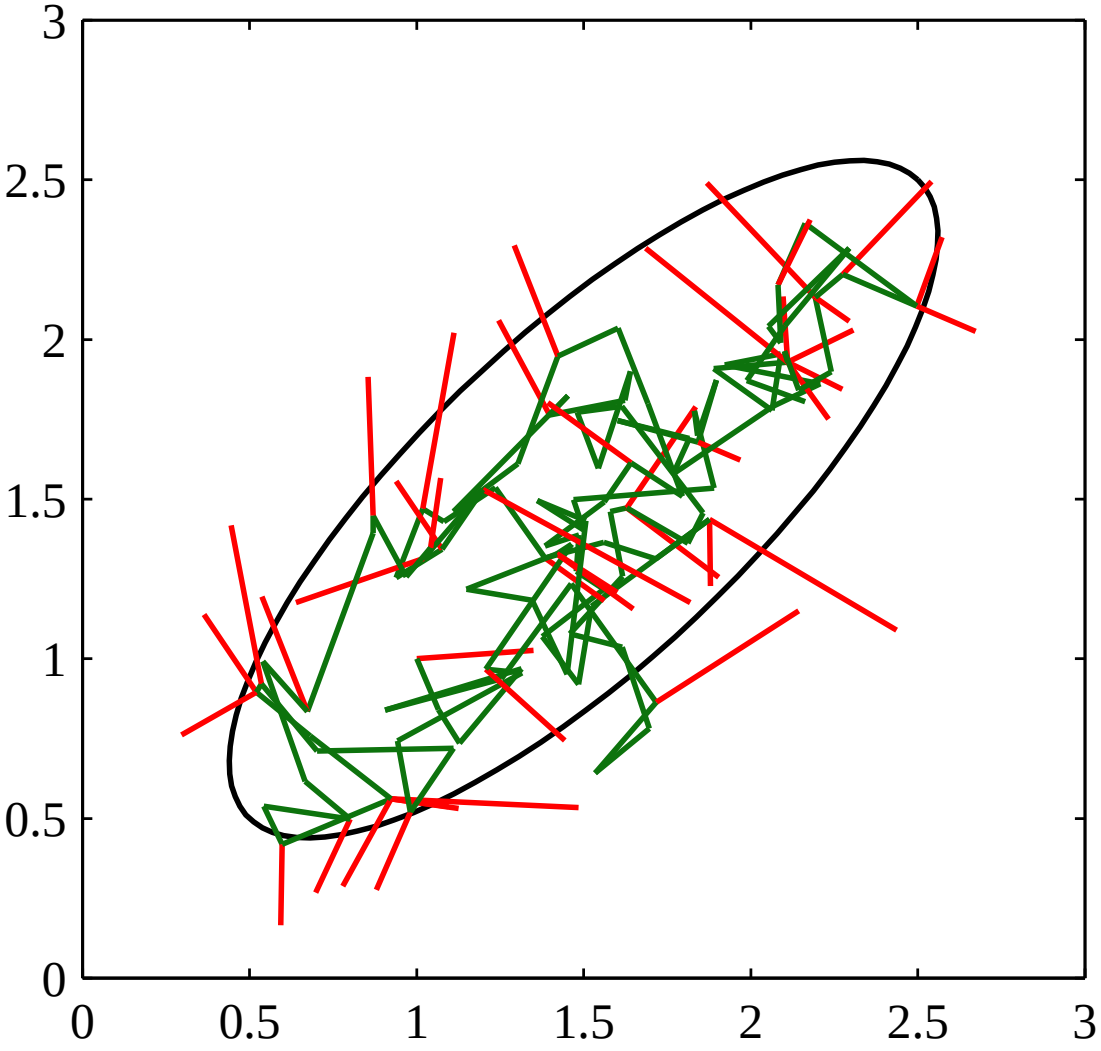

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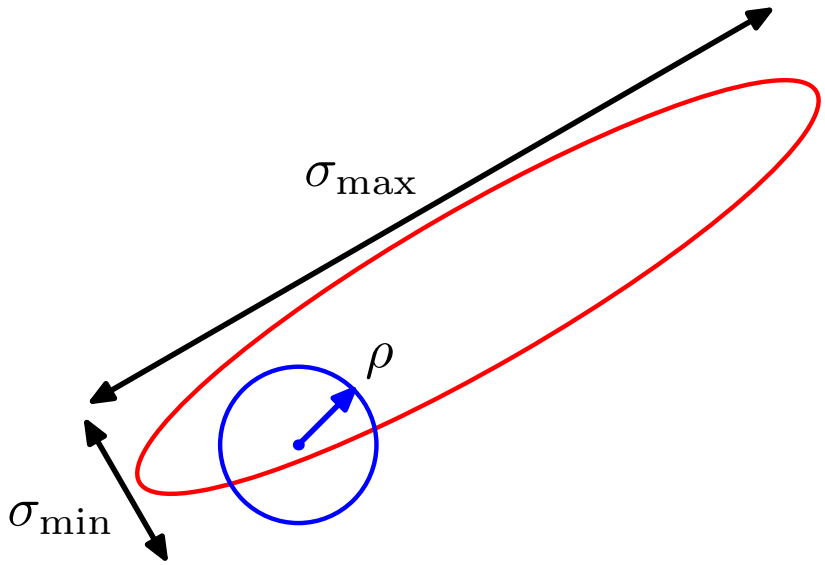

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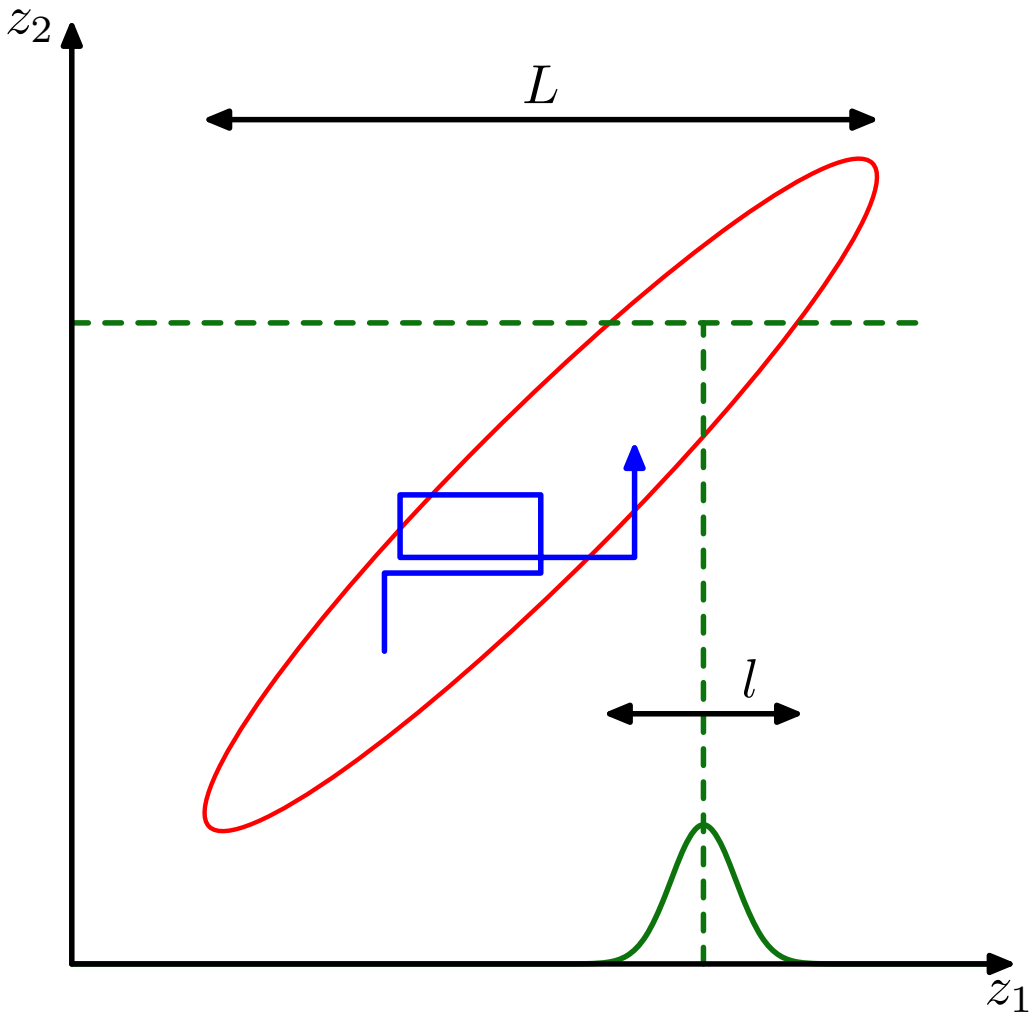

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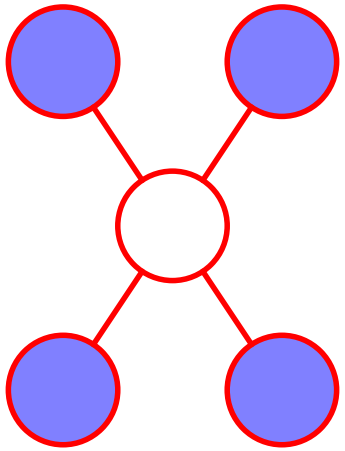

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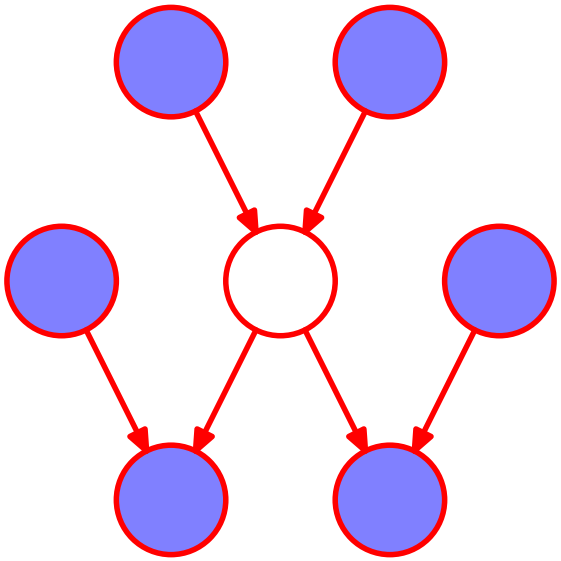
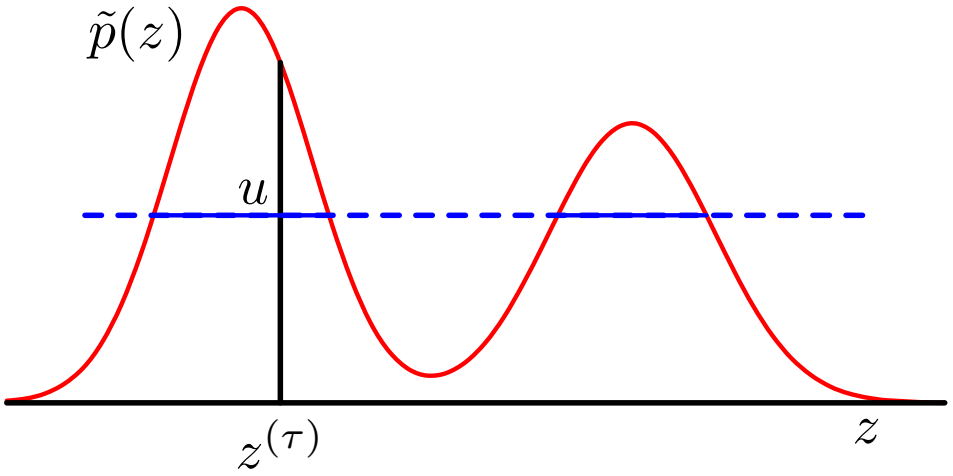


Figure: Chapter 11, Figure 12b



(a)

Figure: Chapter 11, Figure 13a

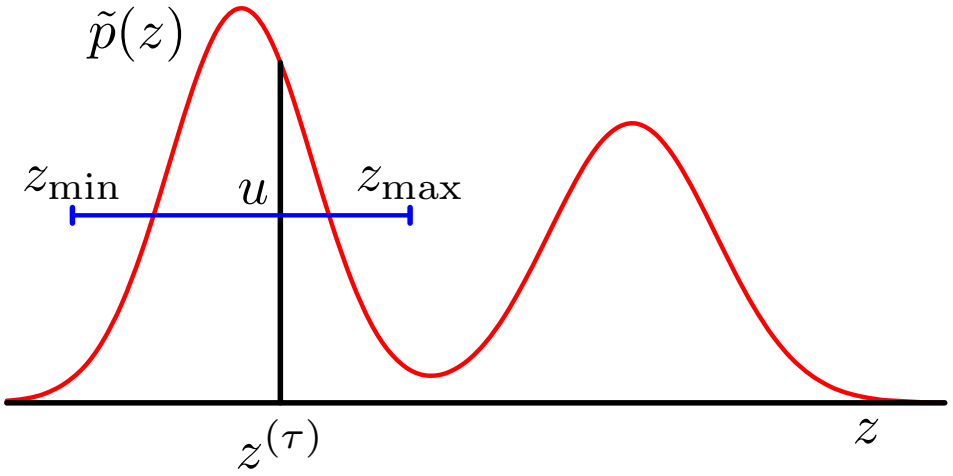


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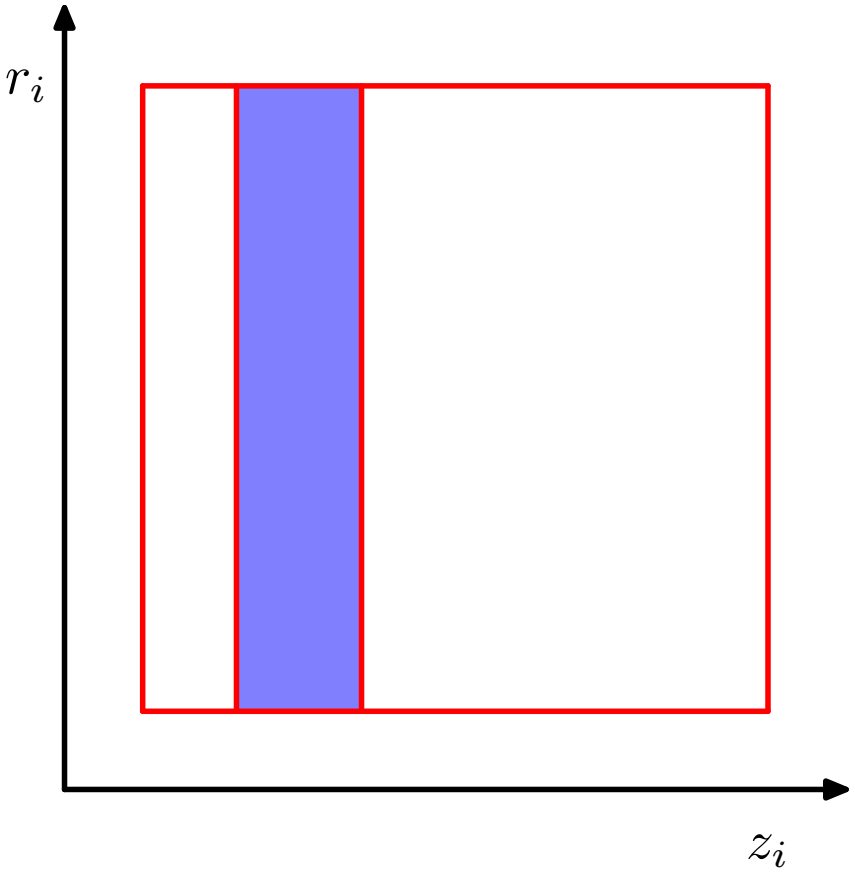
Figure: Chapter 11, Figure 13b



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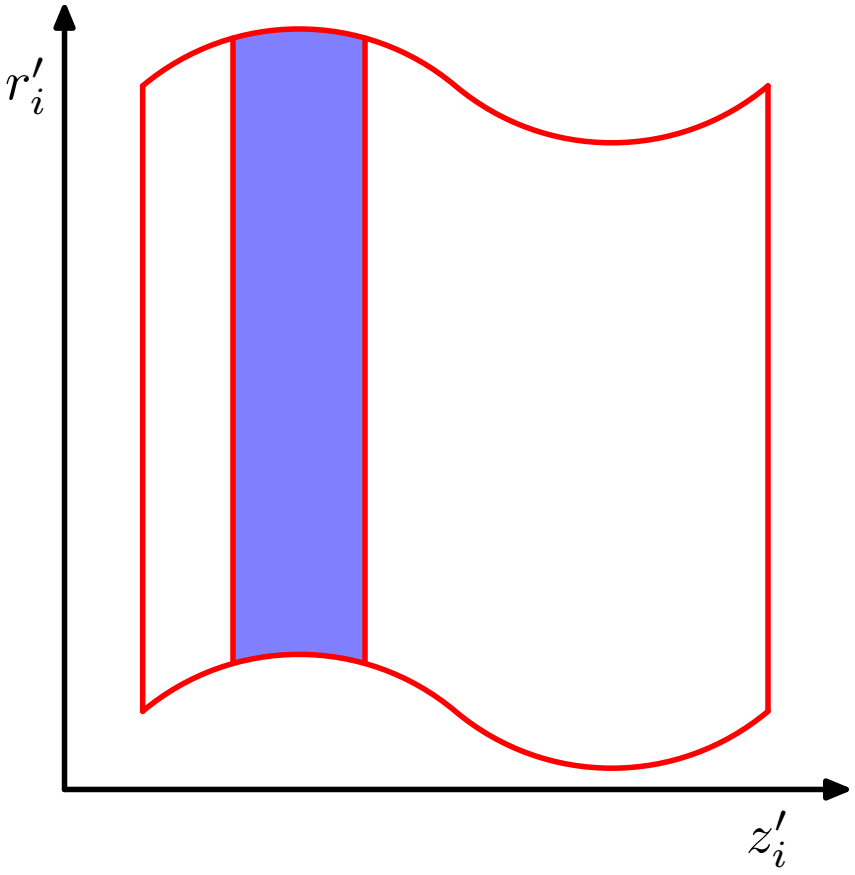

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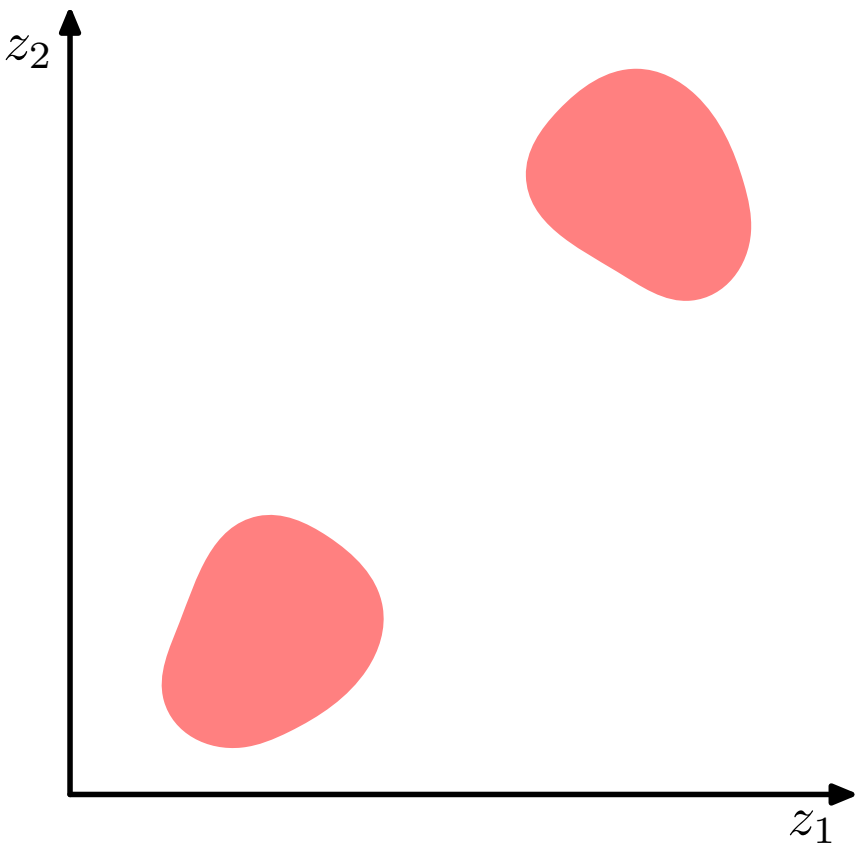

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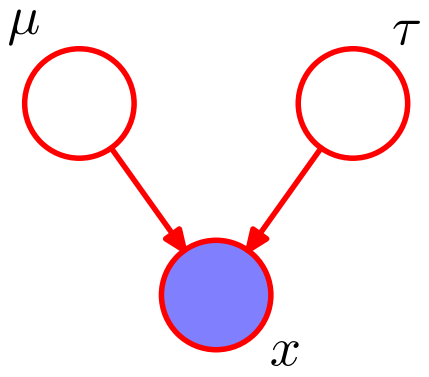

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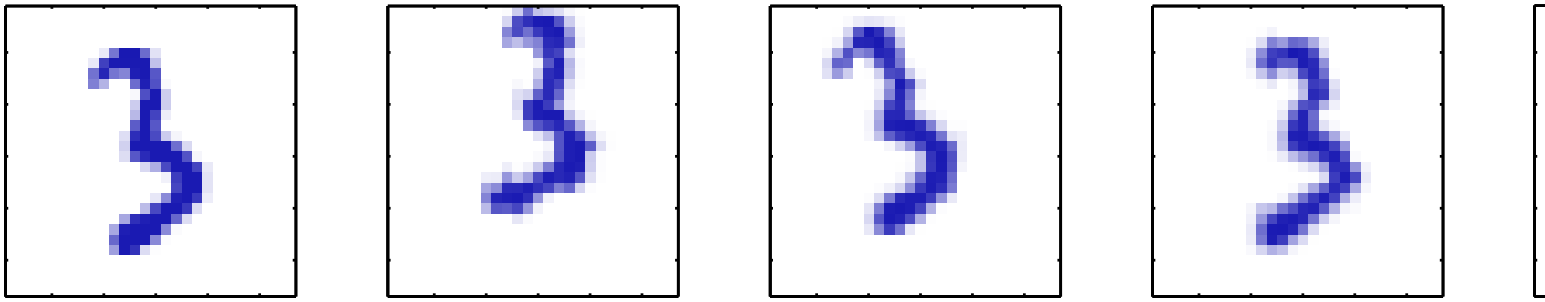

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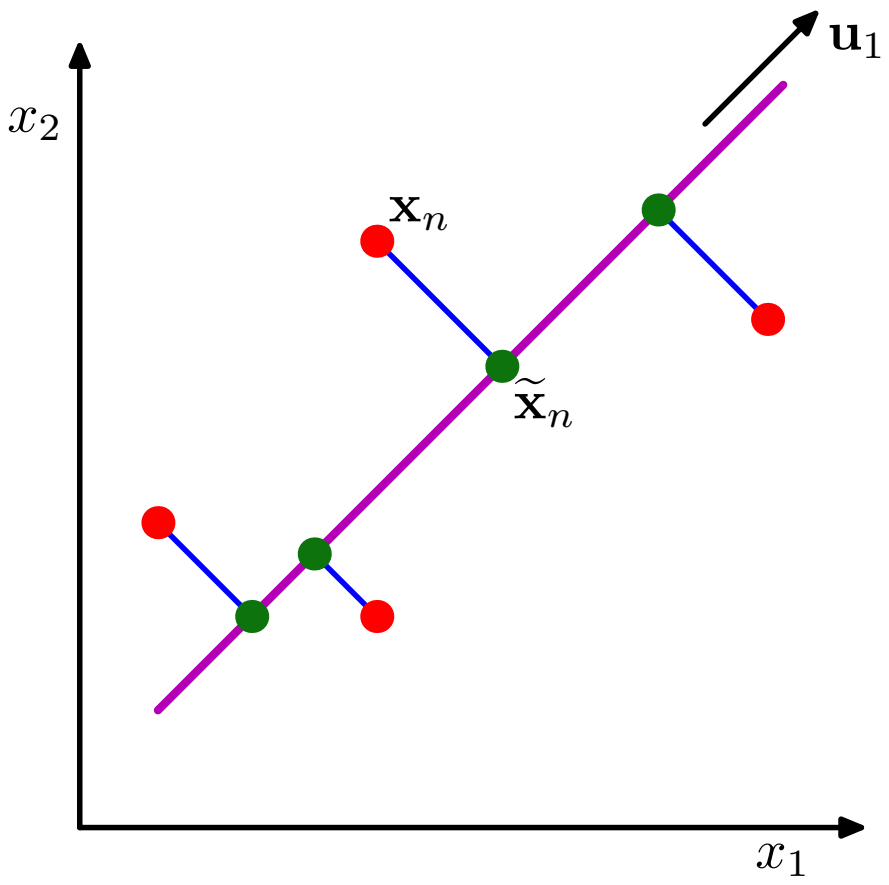

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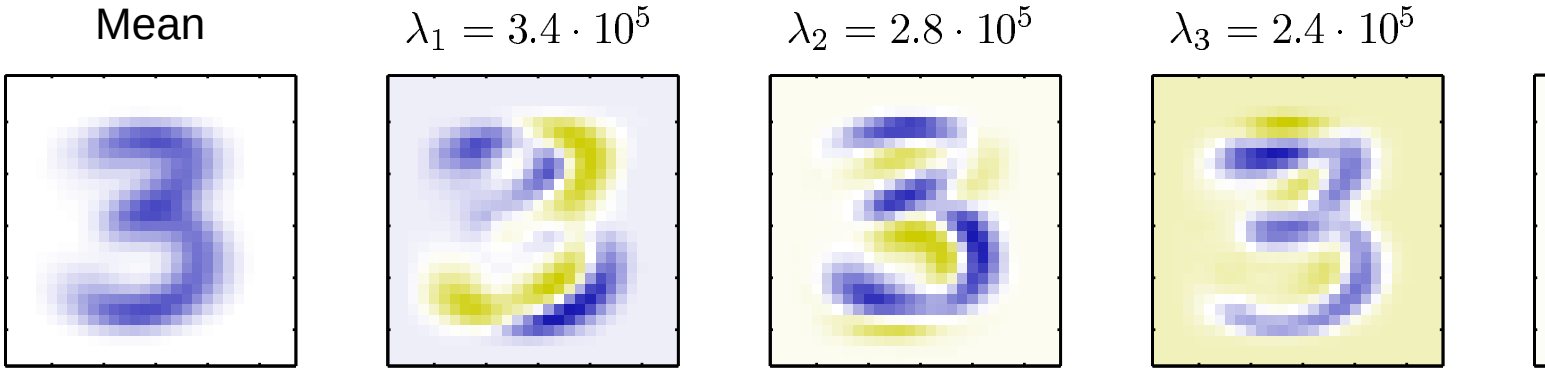

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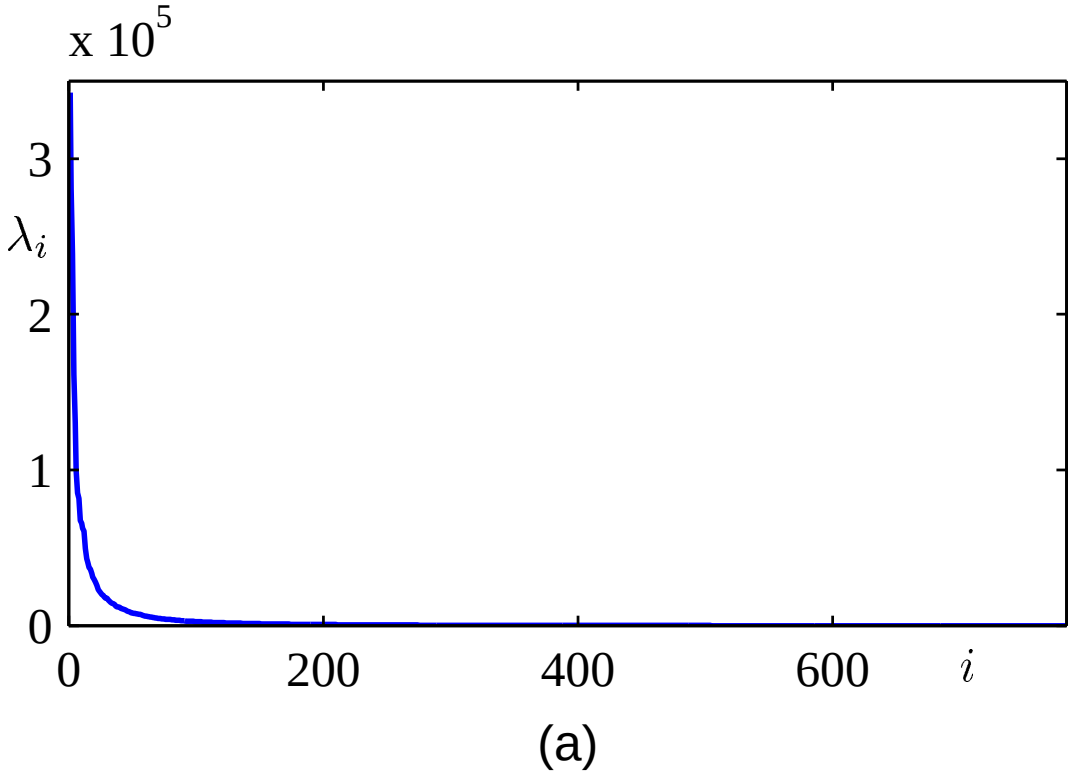

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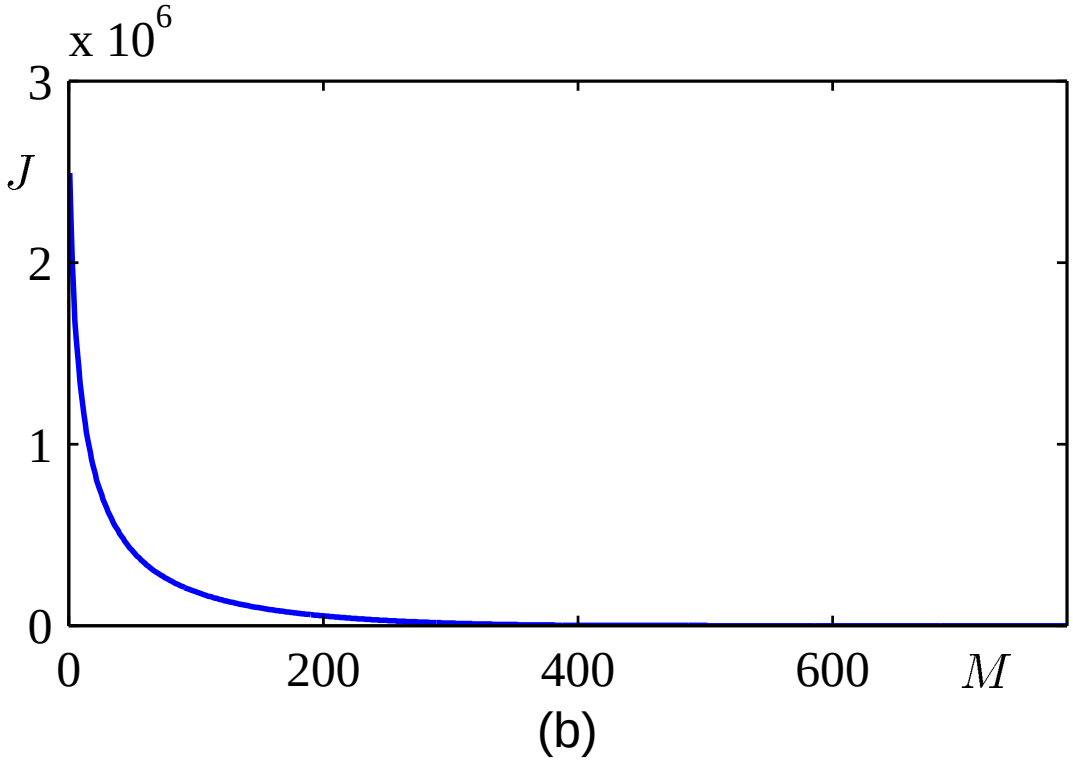

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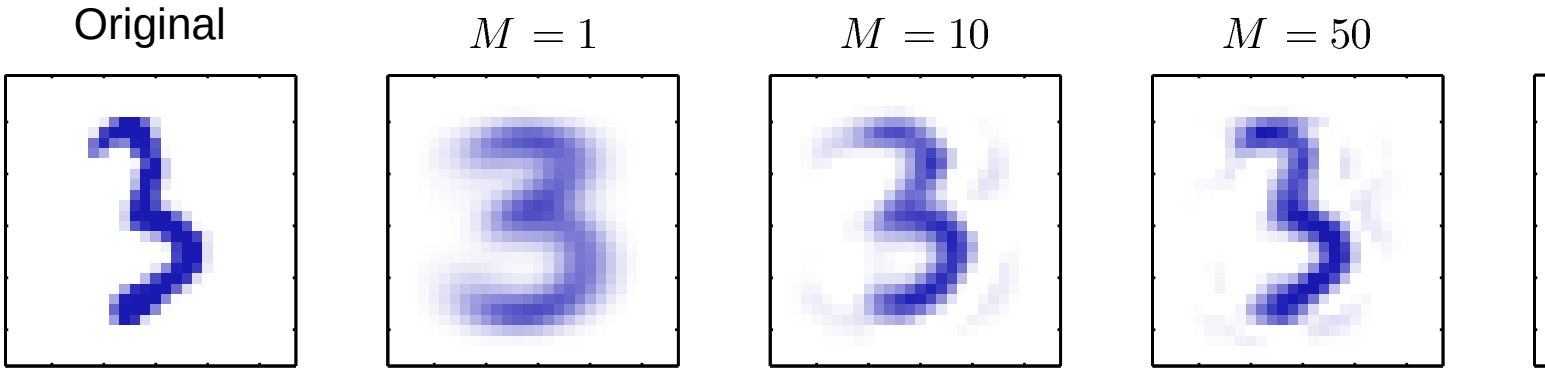

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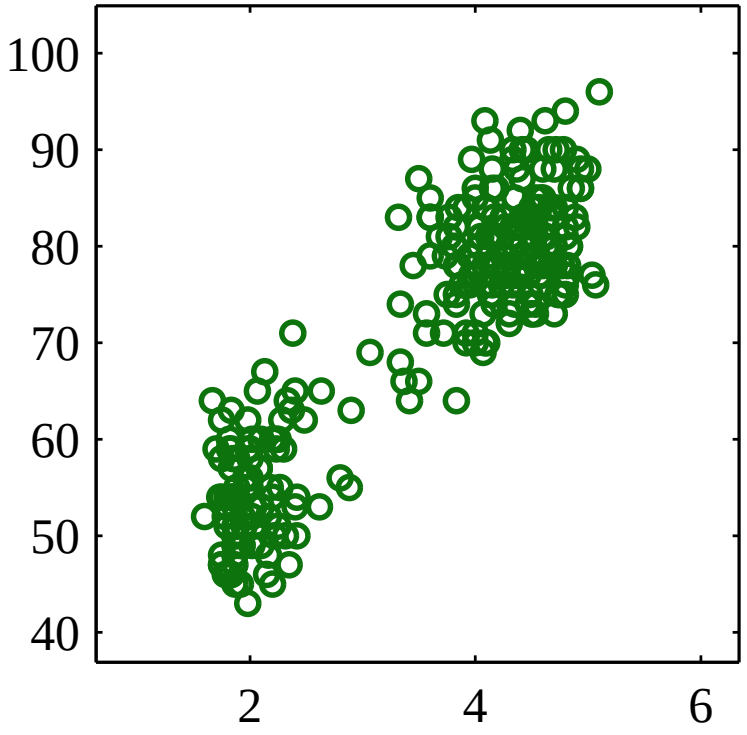

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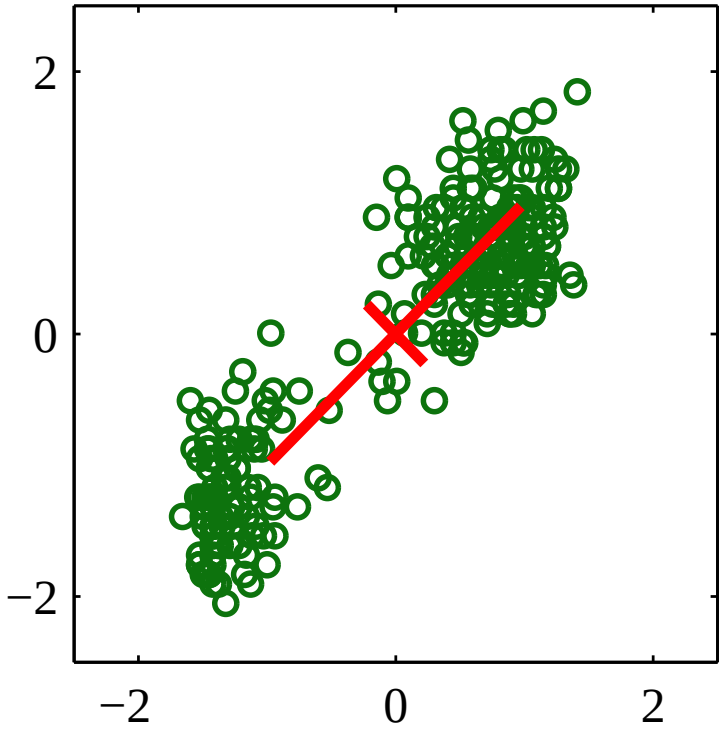

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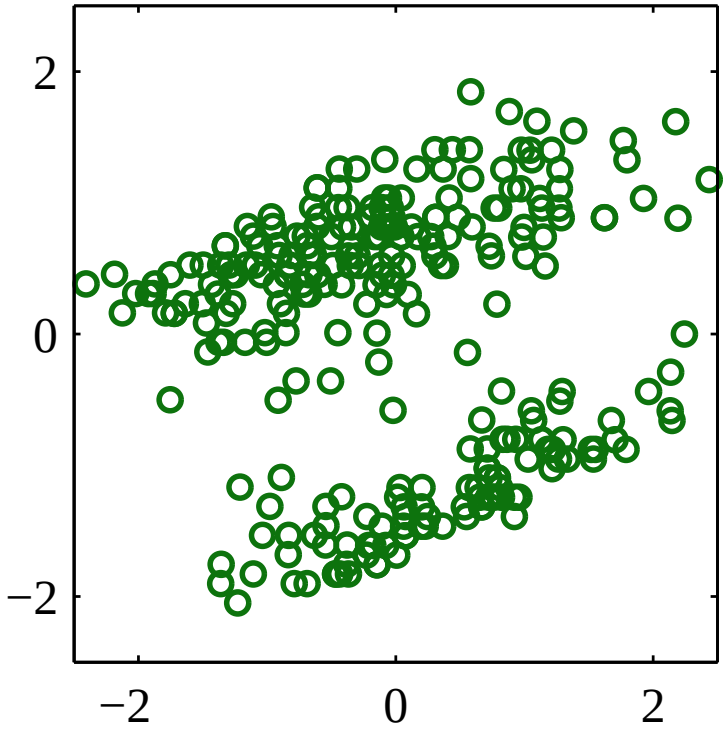

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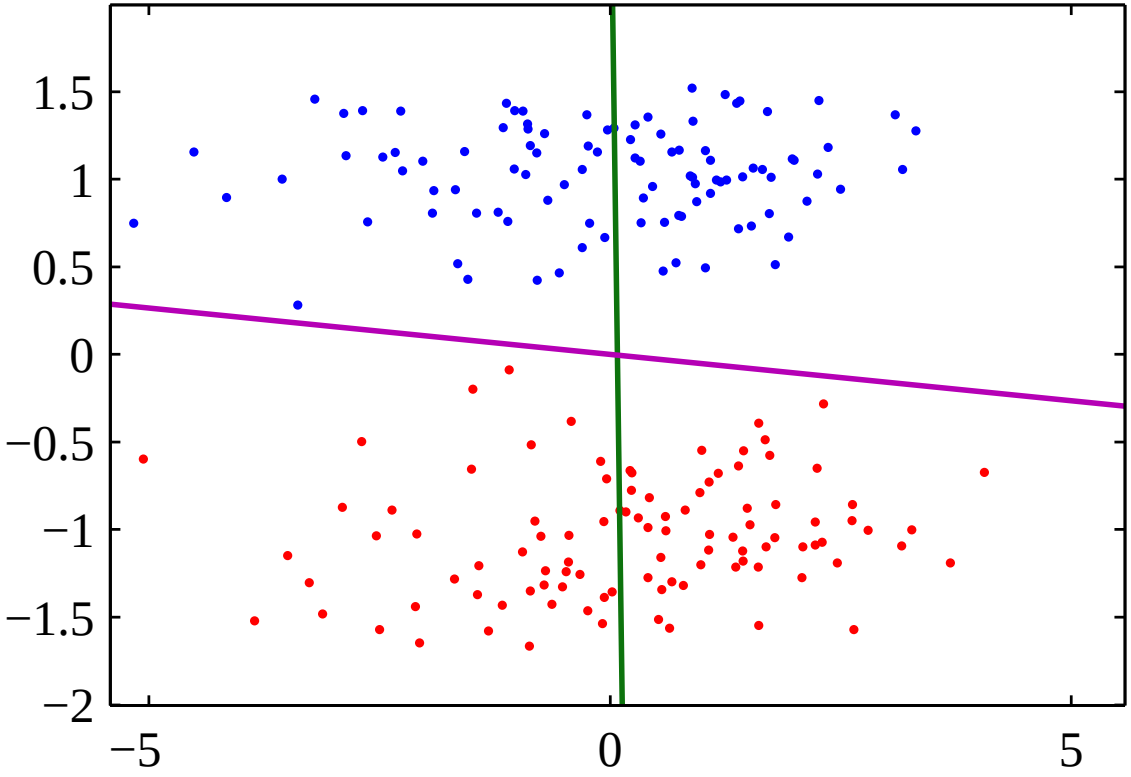

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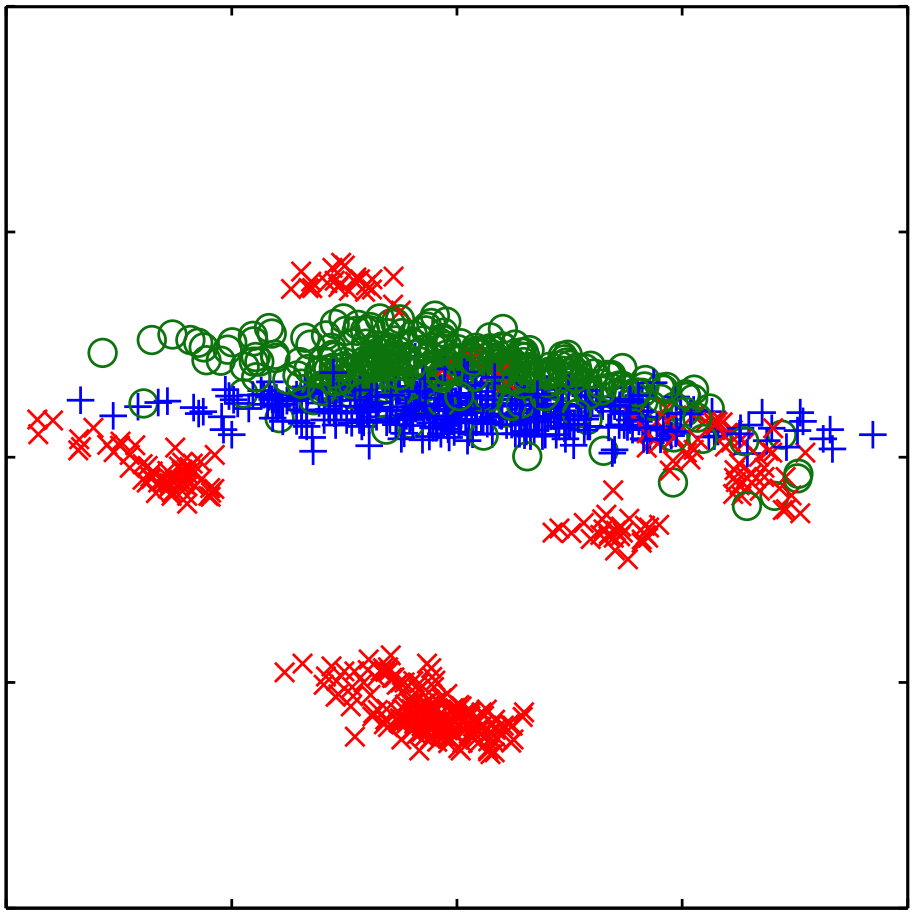

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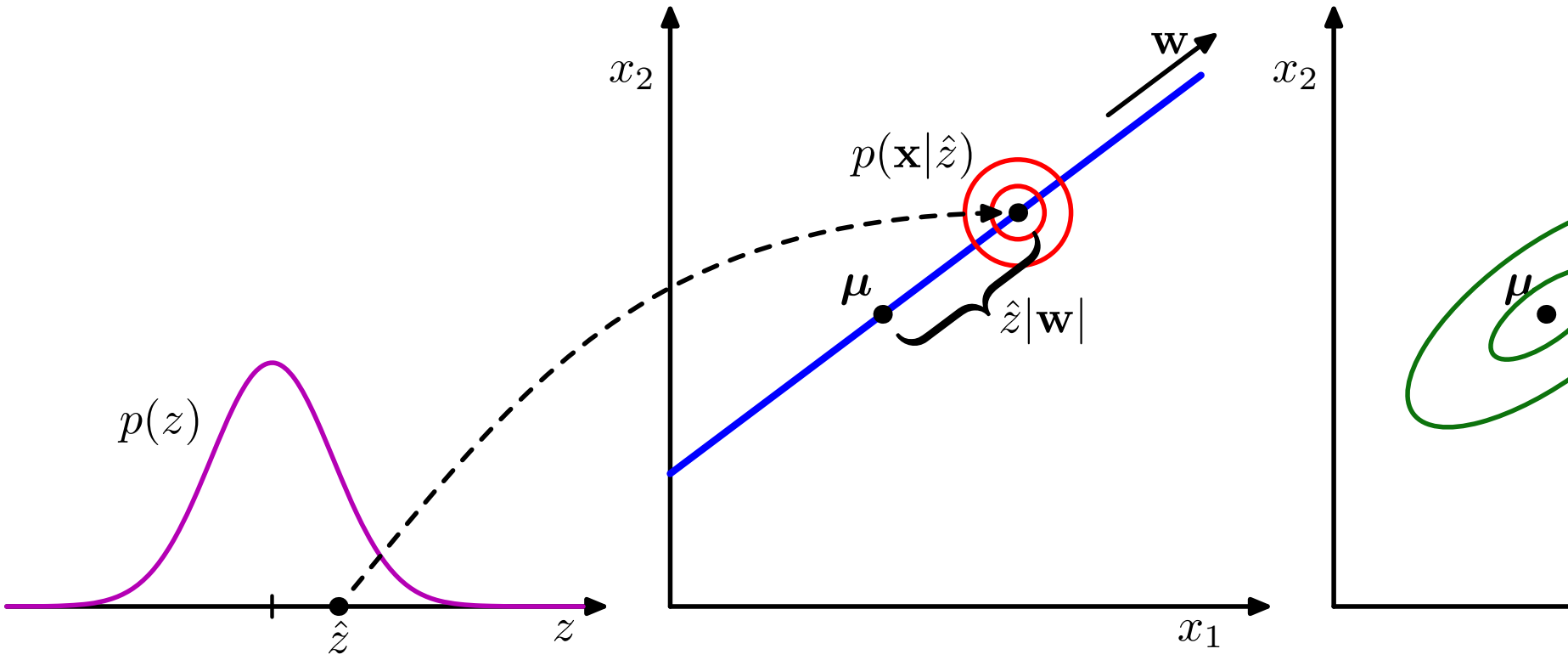

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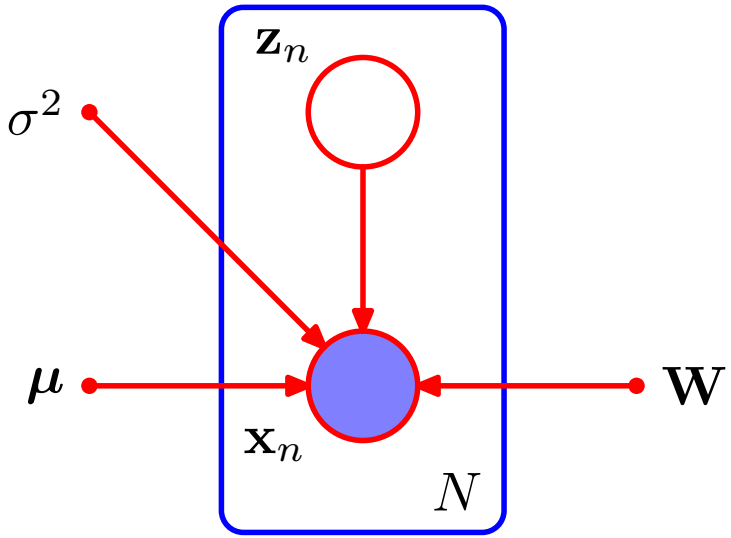

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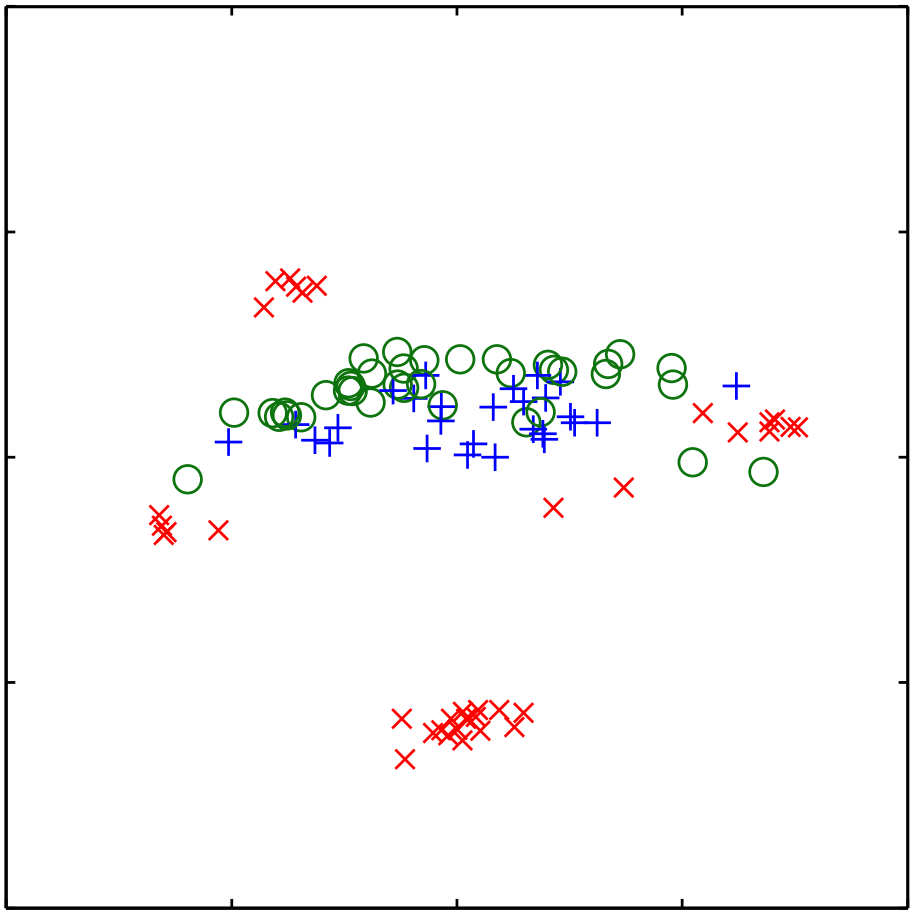

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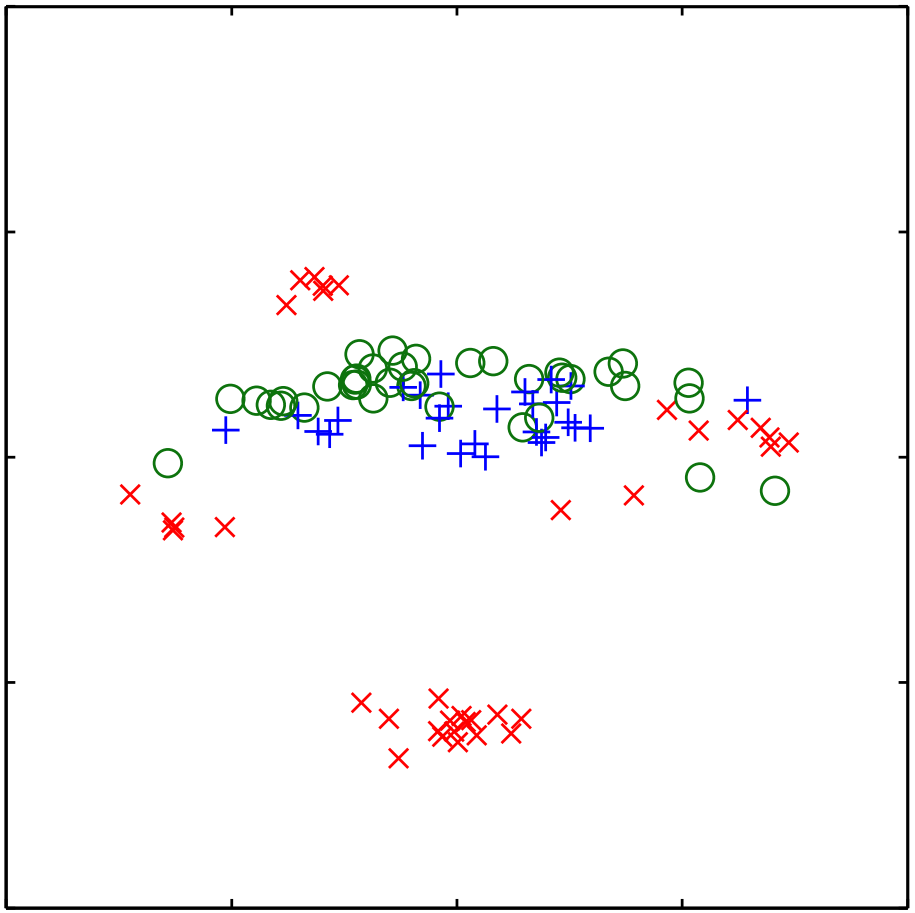

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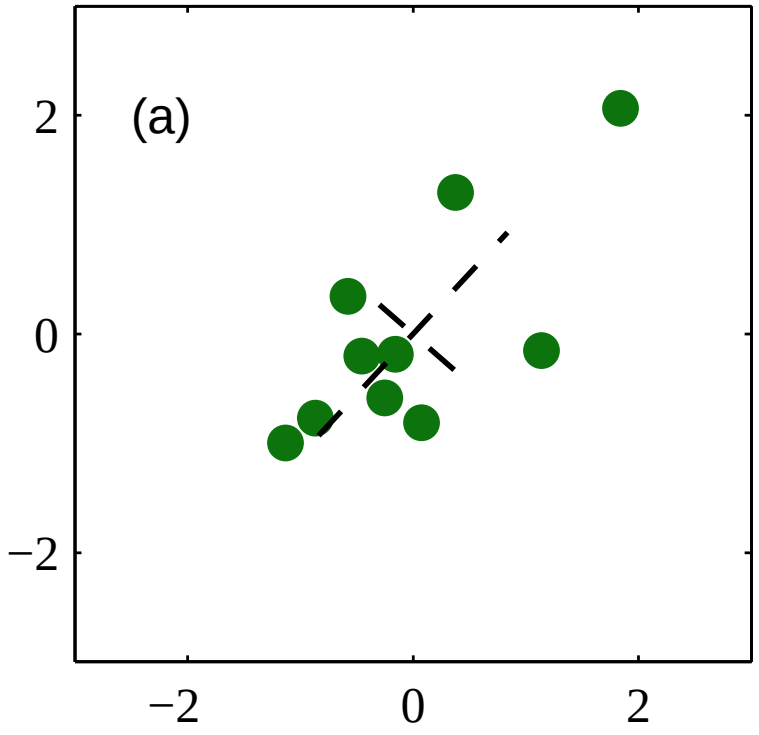

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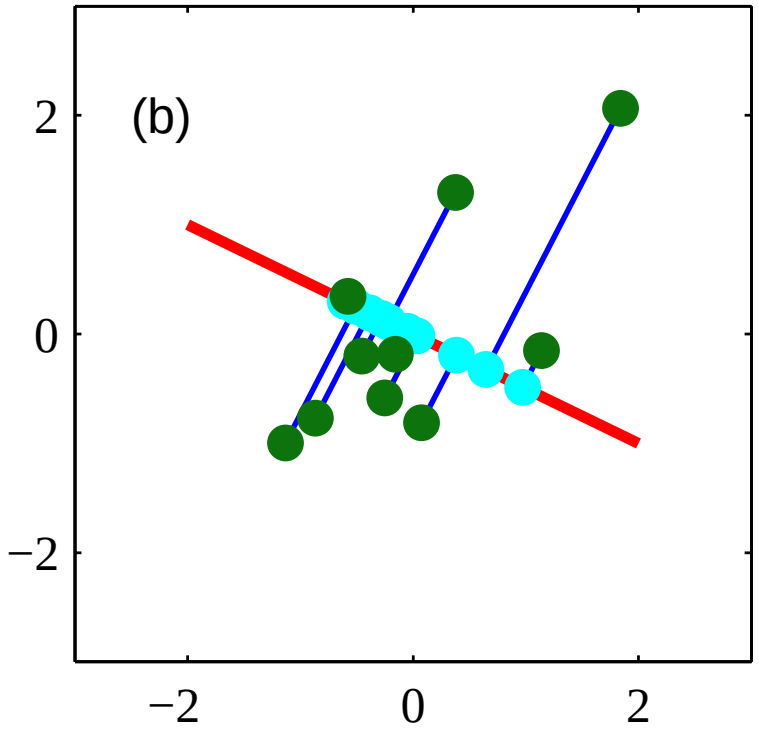

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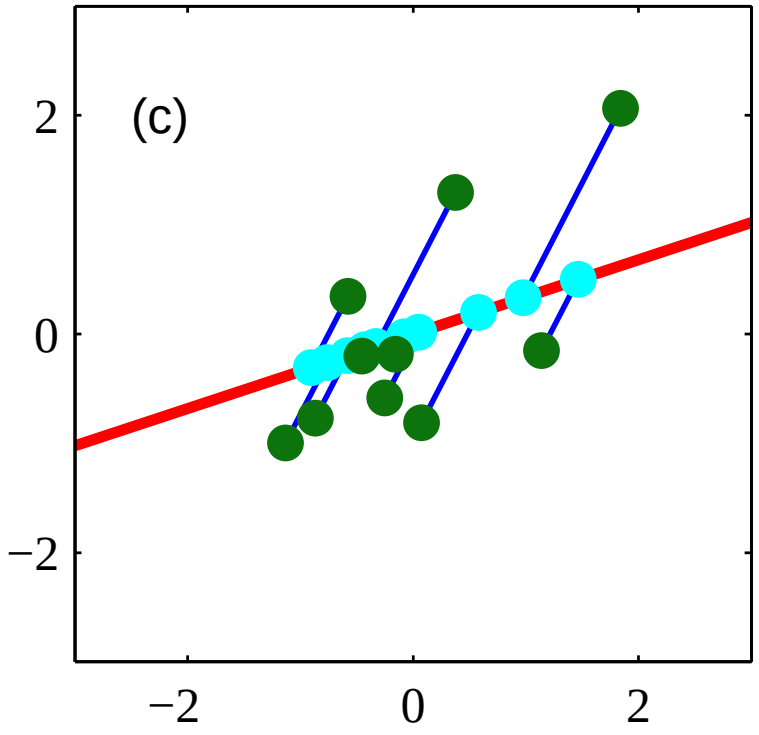

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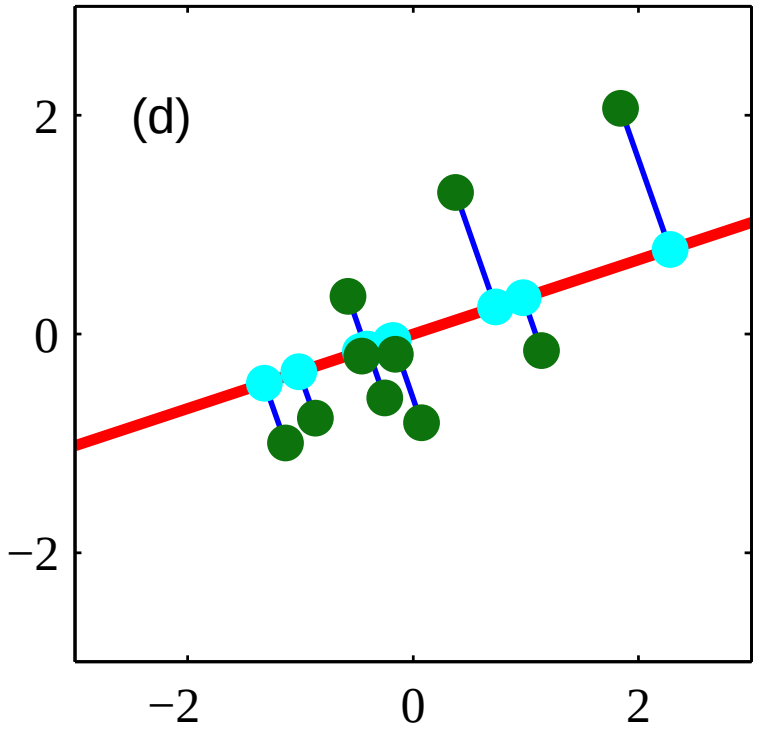

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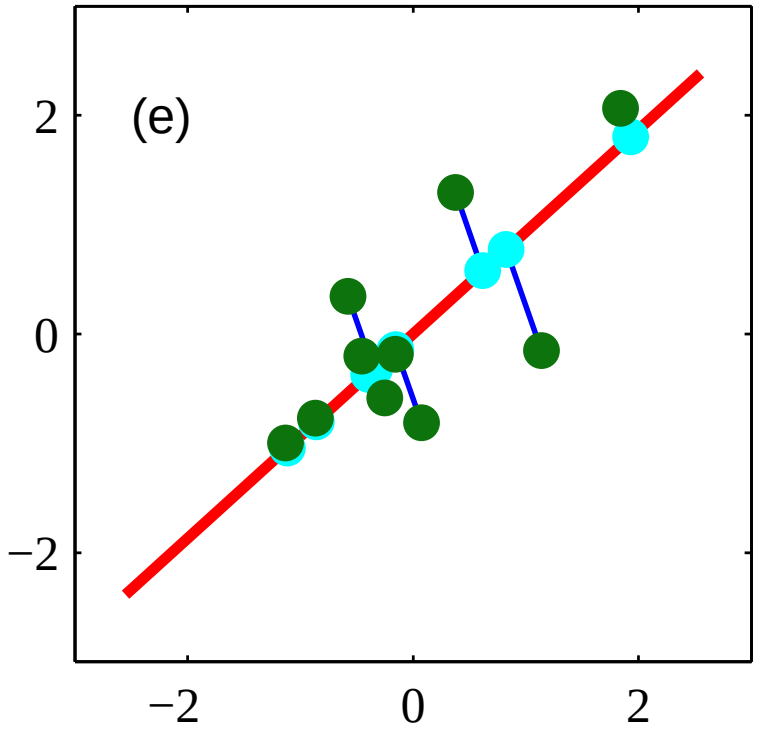

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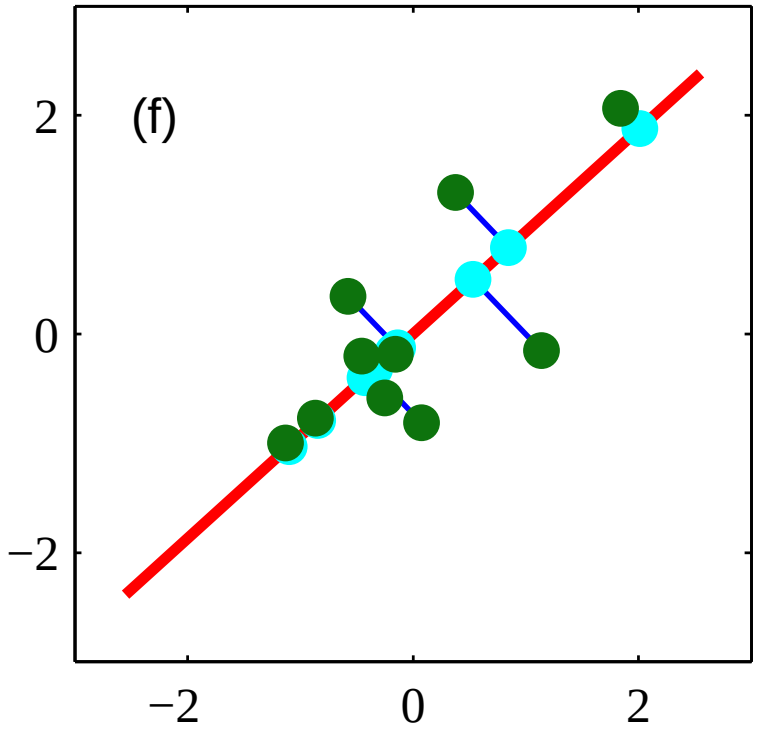

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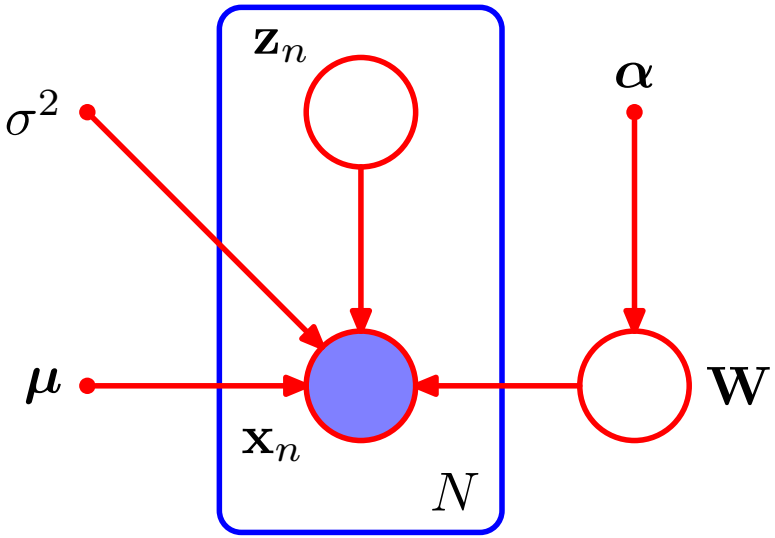

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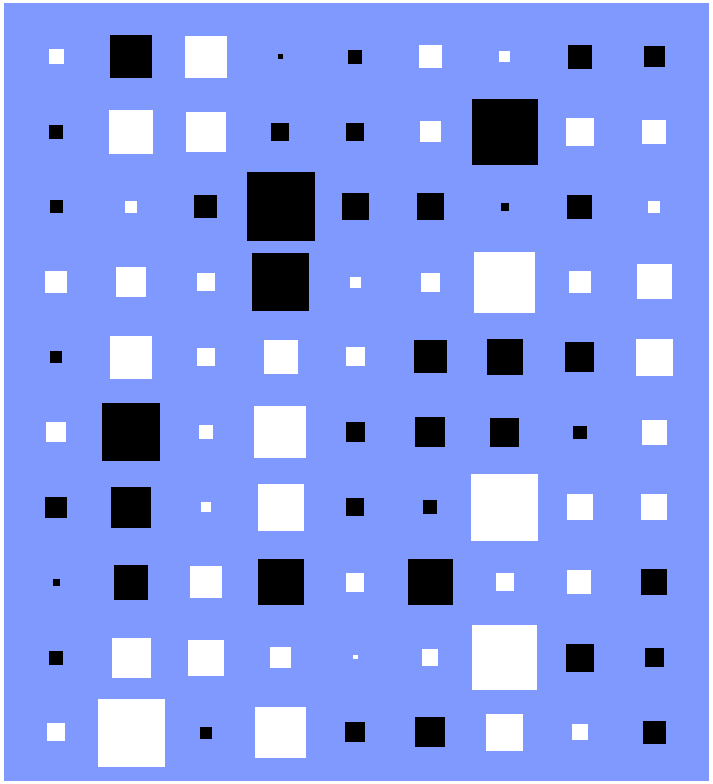
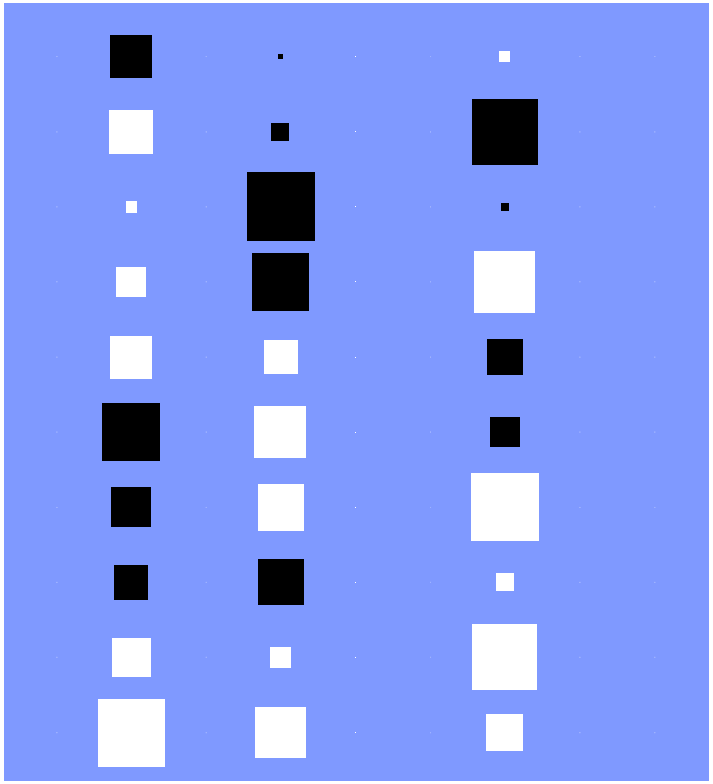


Figure: Chapter 12, Figure 14a



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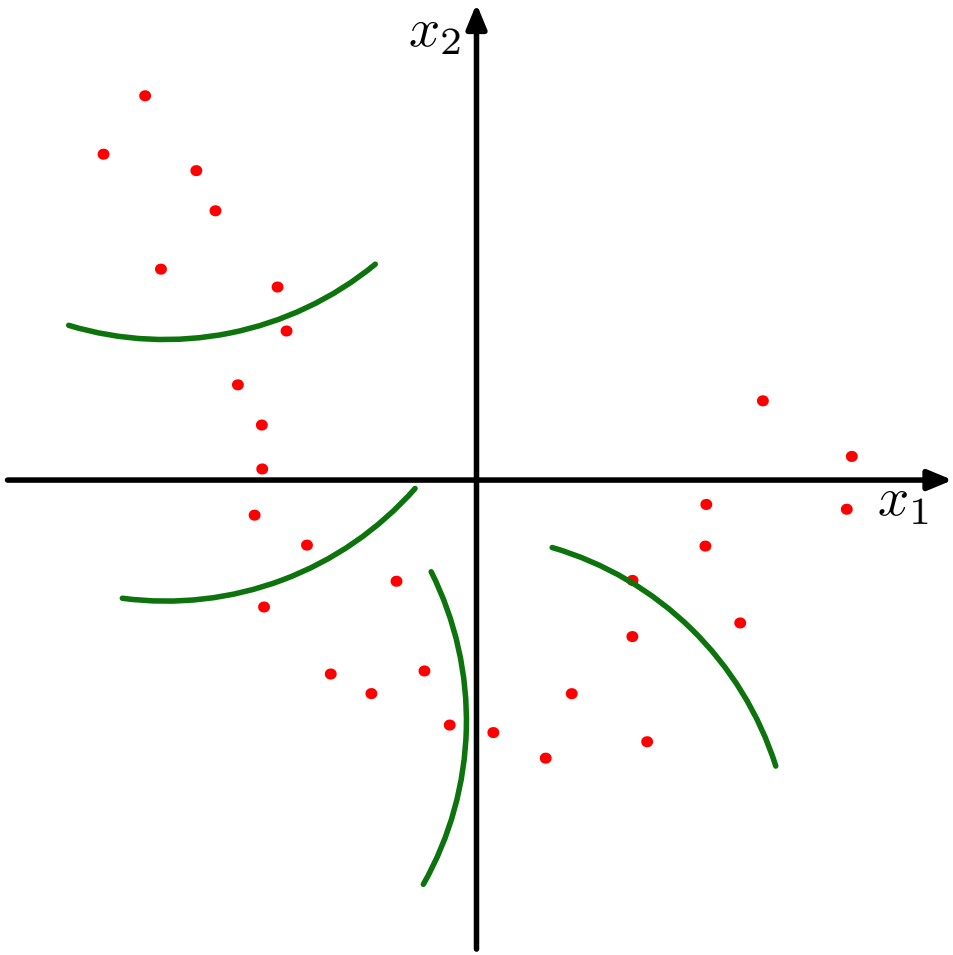
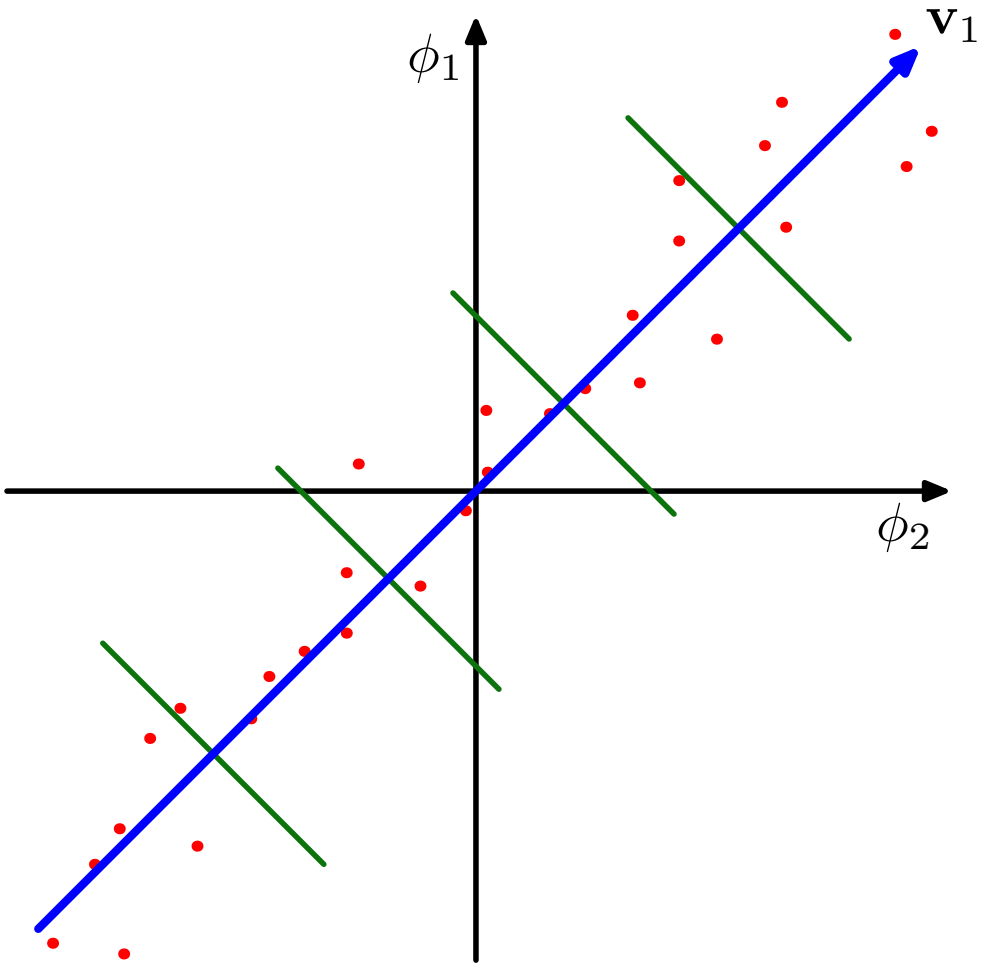


Figure: Chapter 12, Figure 16a



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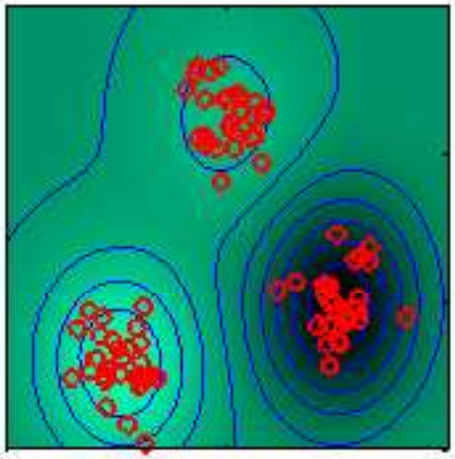

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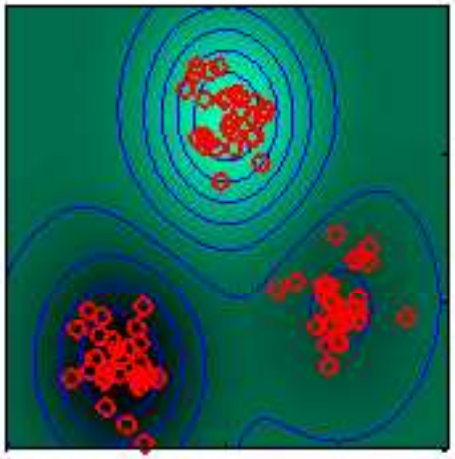

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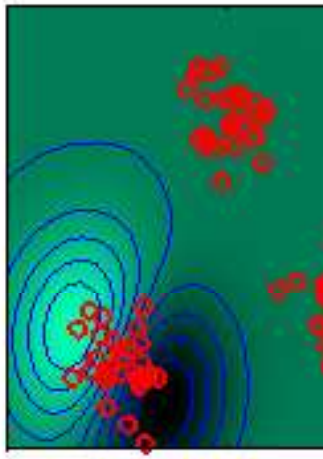

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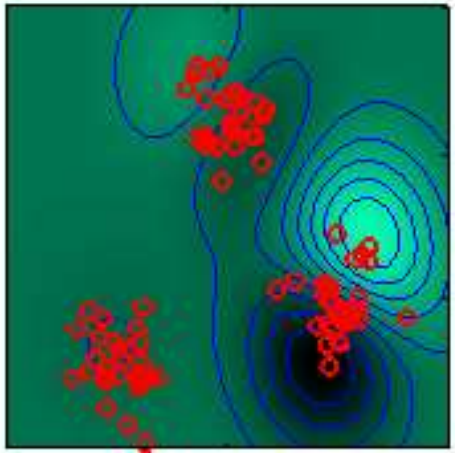

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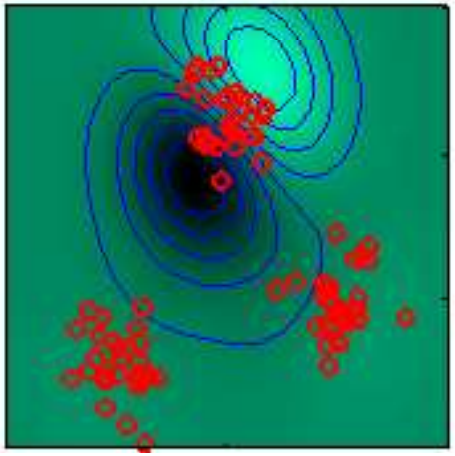

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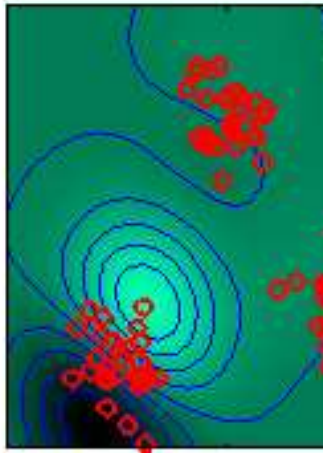


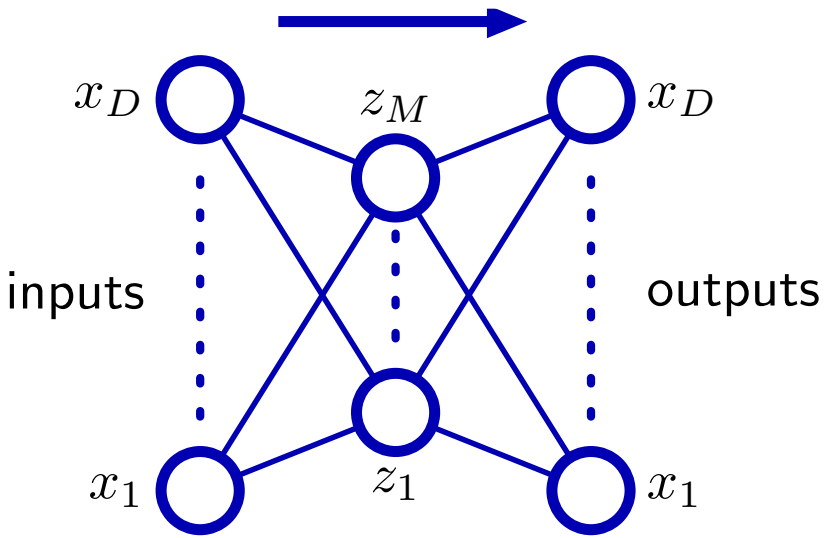
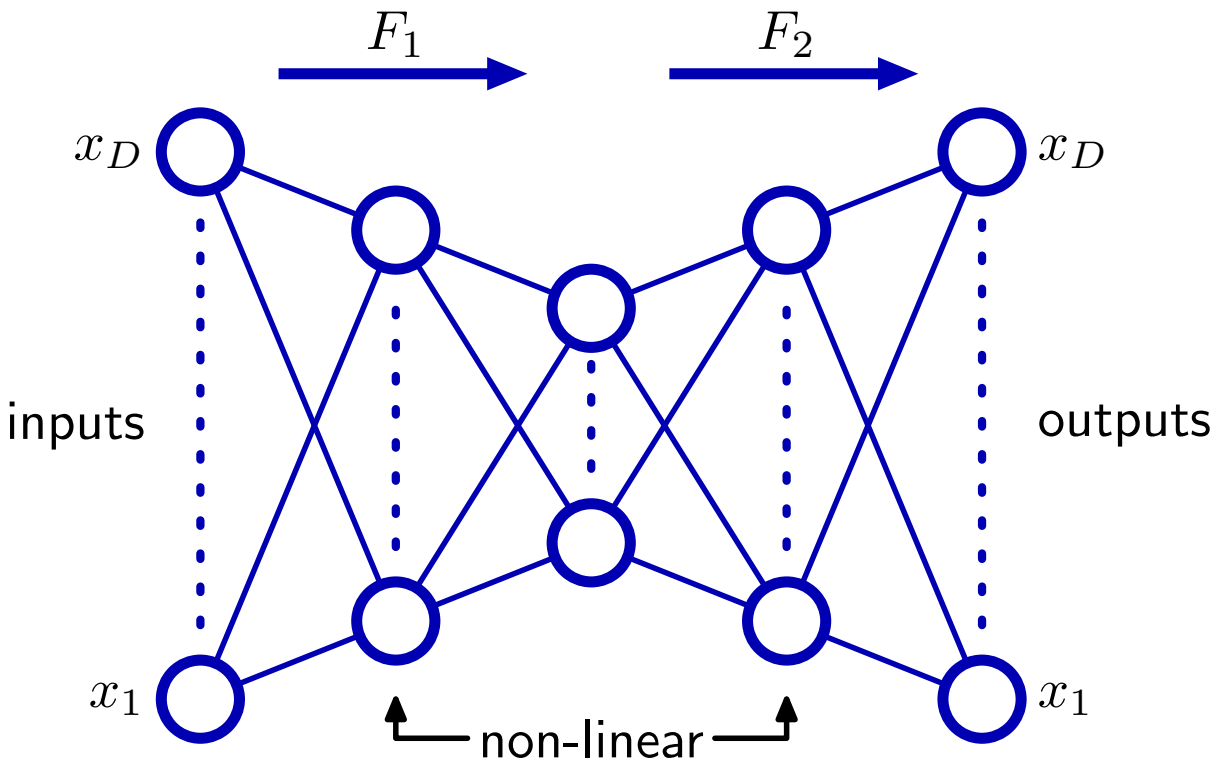


Figure: Chapter 12, Figure 18



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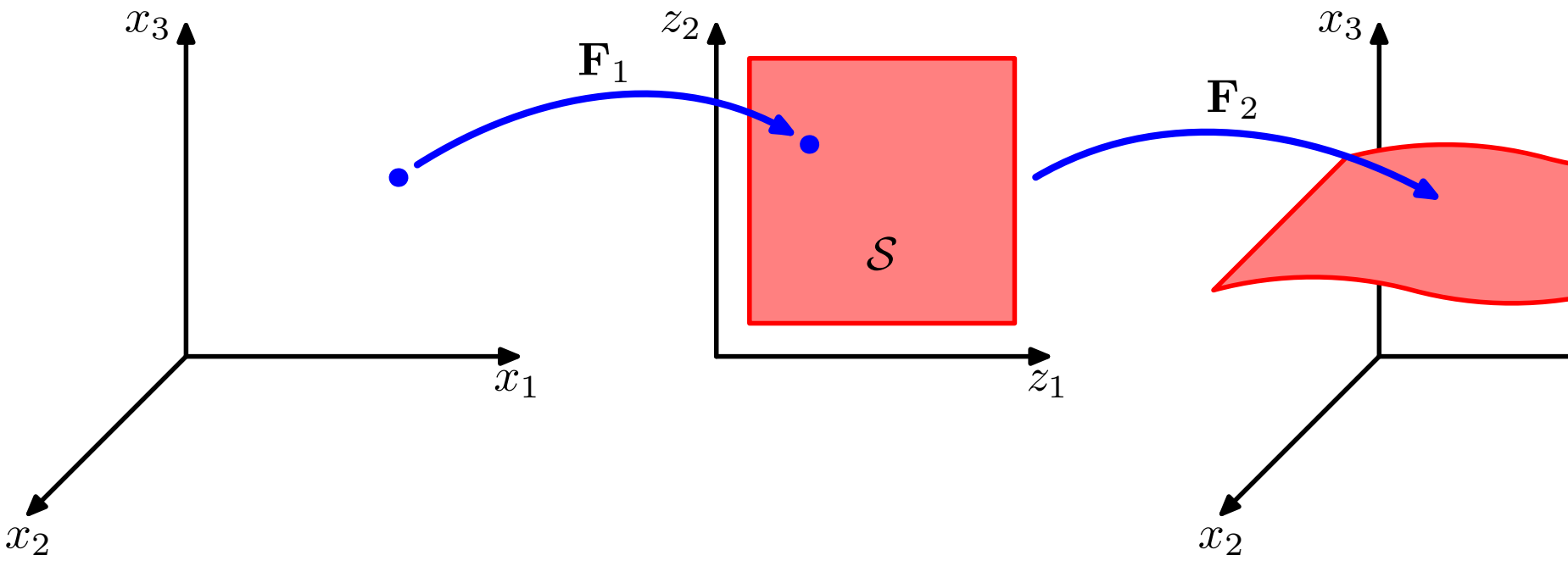

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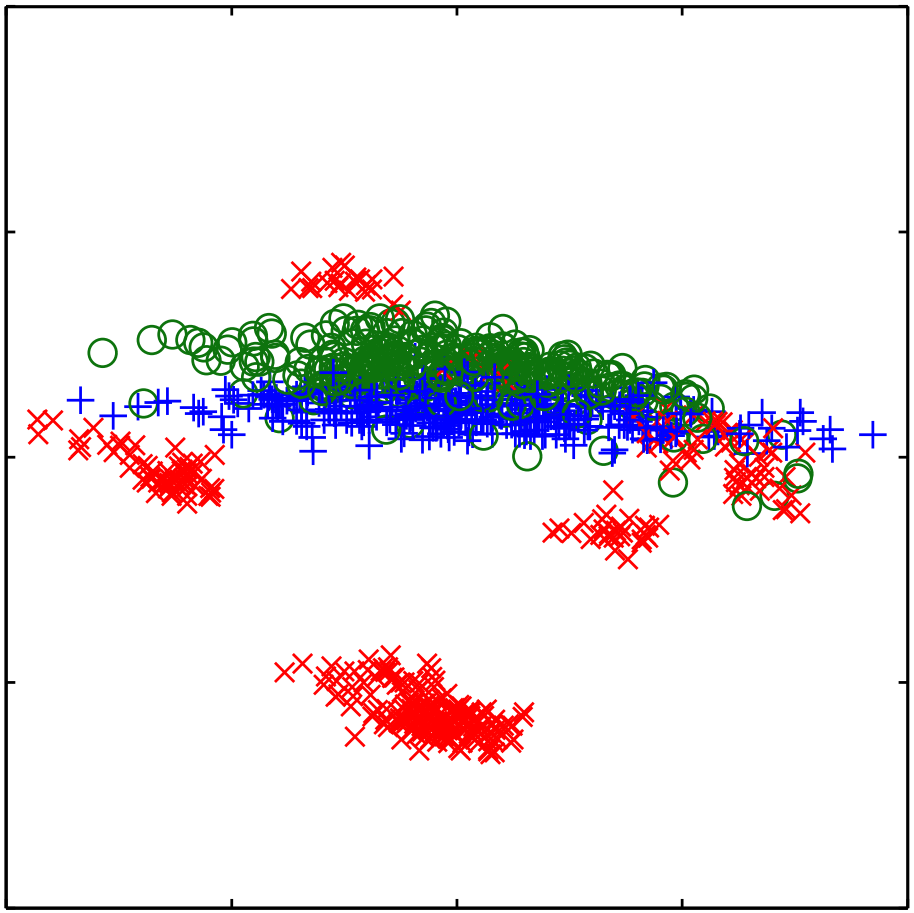


Figure: Chapter 12, Figure 21a

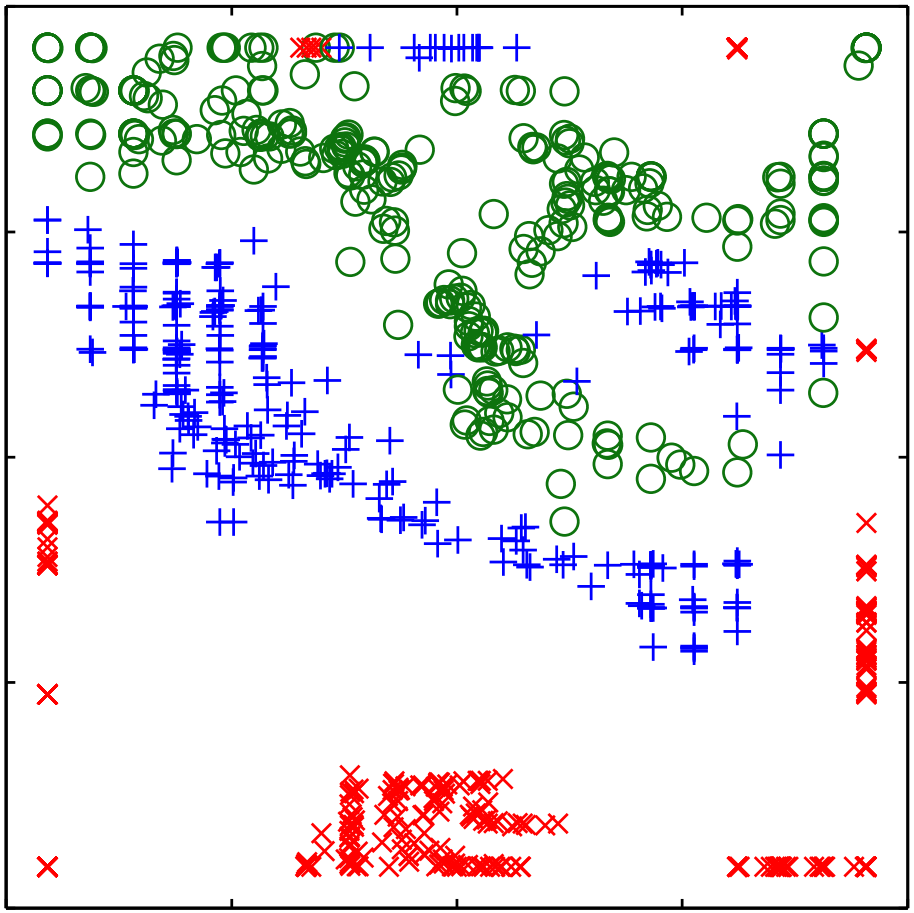
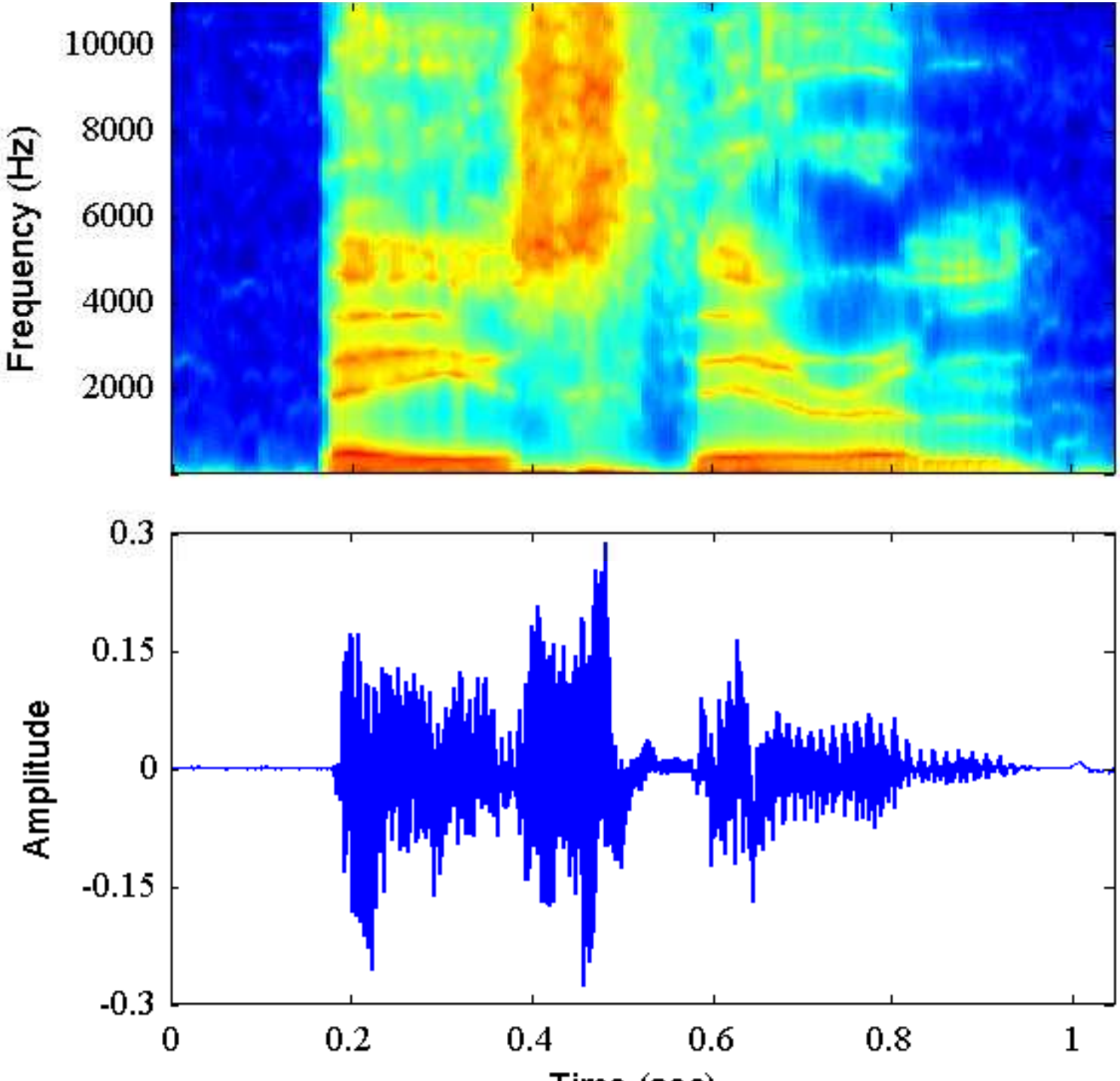


Figure: Chapter 12, Figure 21b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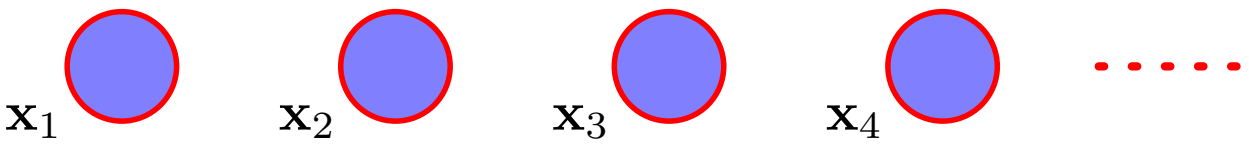
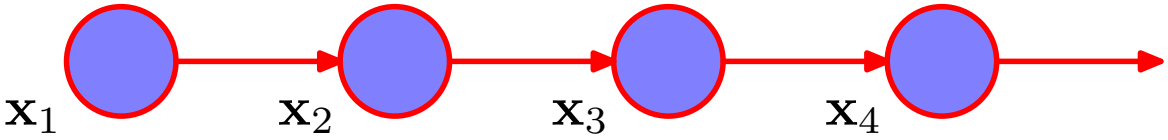


Figure: Chapter 13, Figure 2



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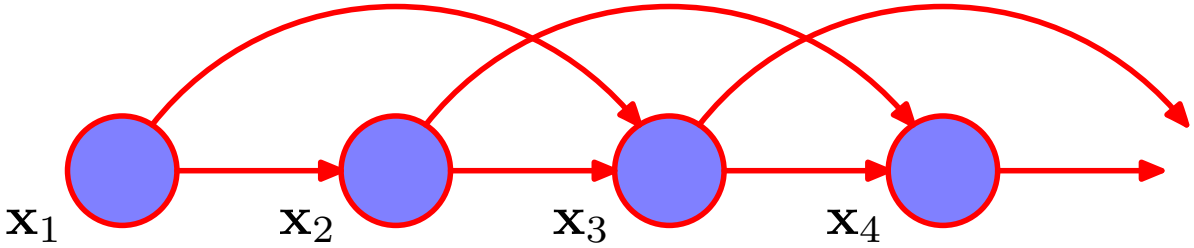

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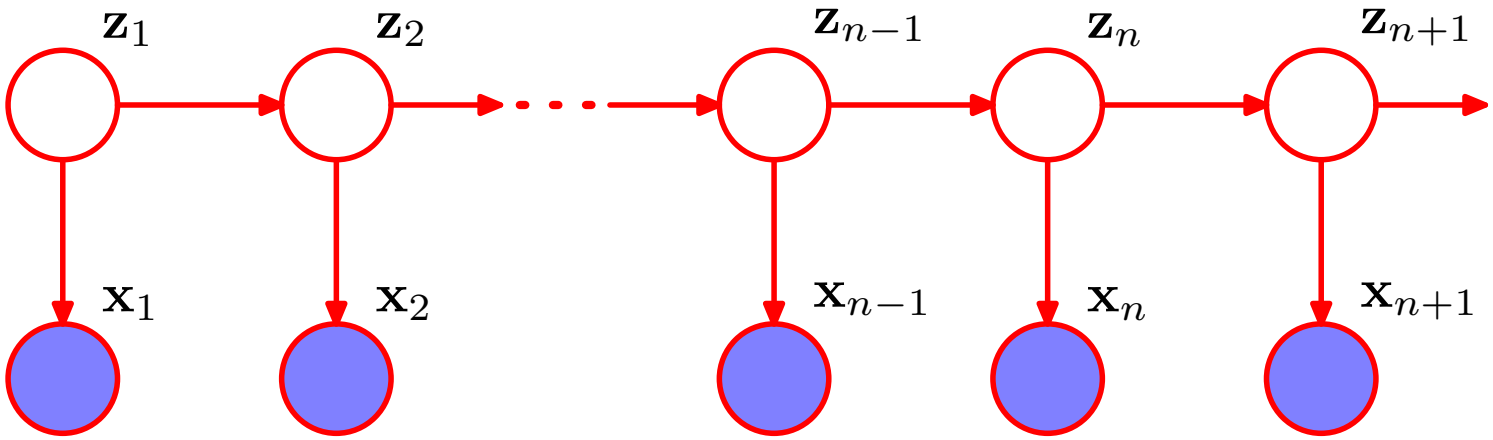

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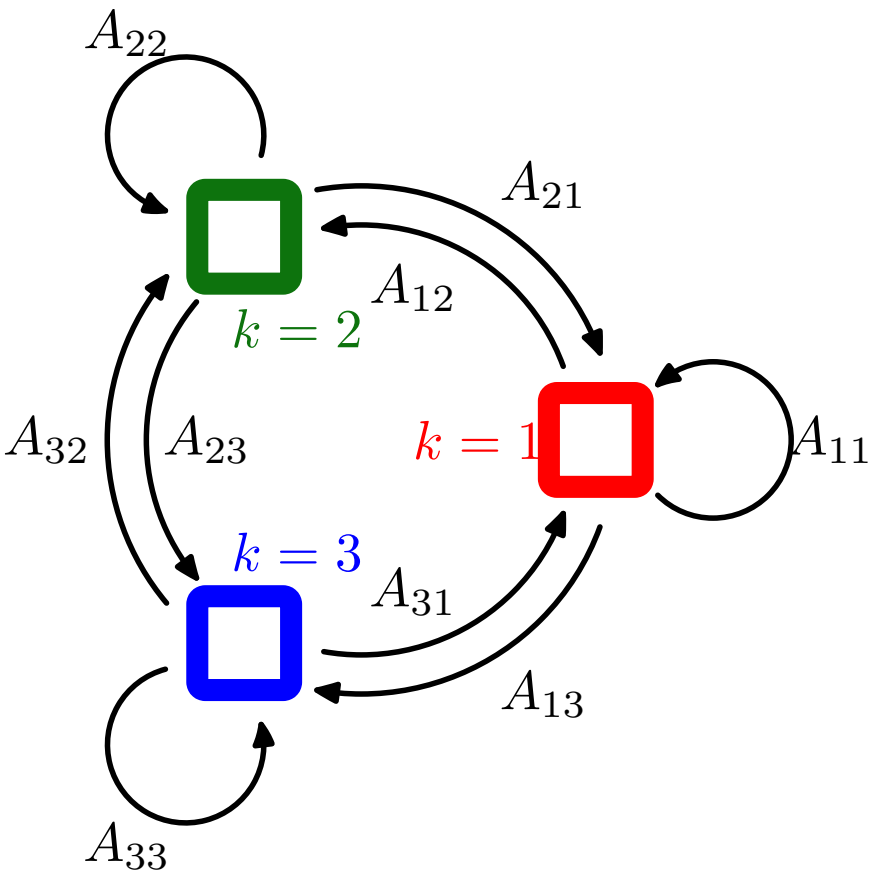


Figure: Chapter 13, Figure 6

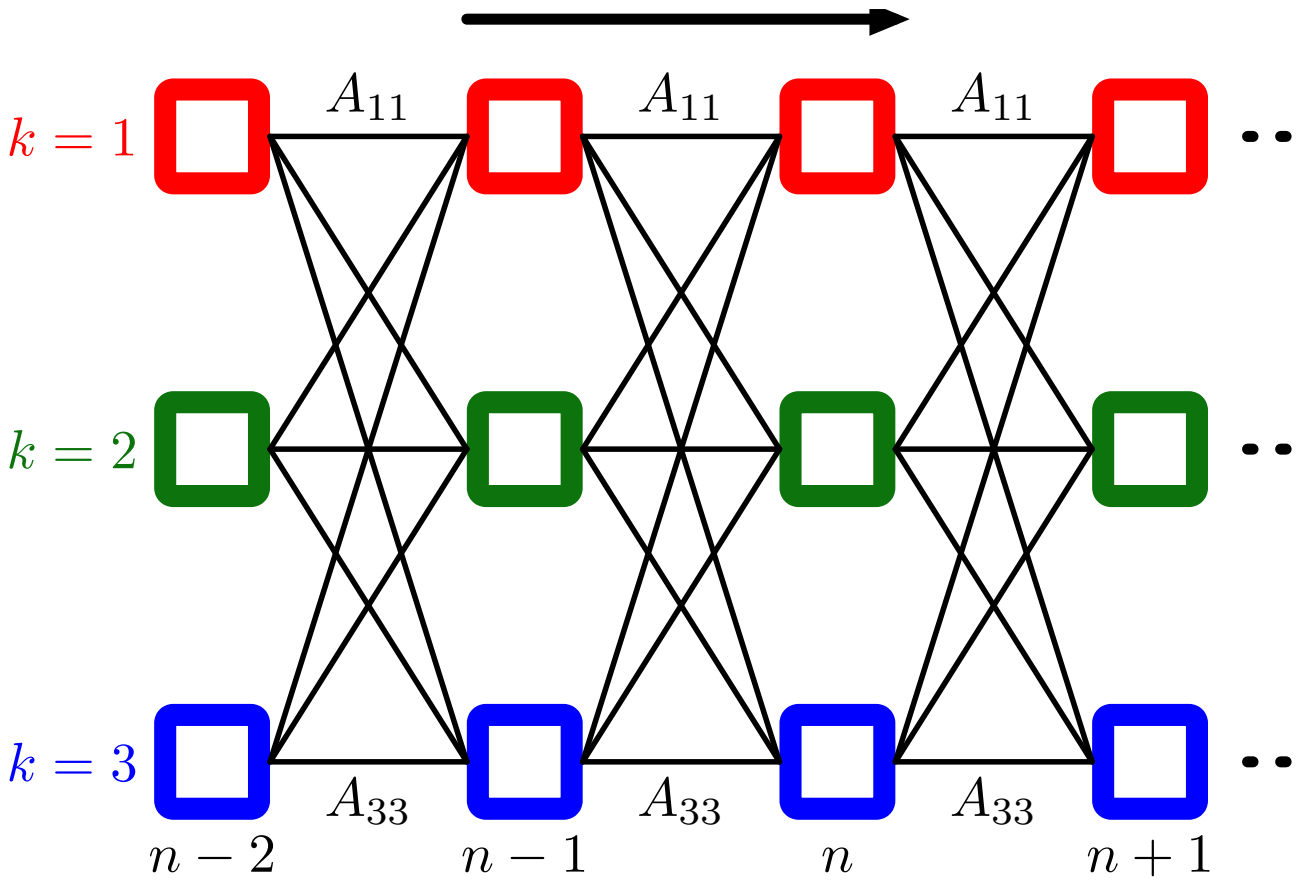


Figure: Chapter 13, Figure 7

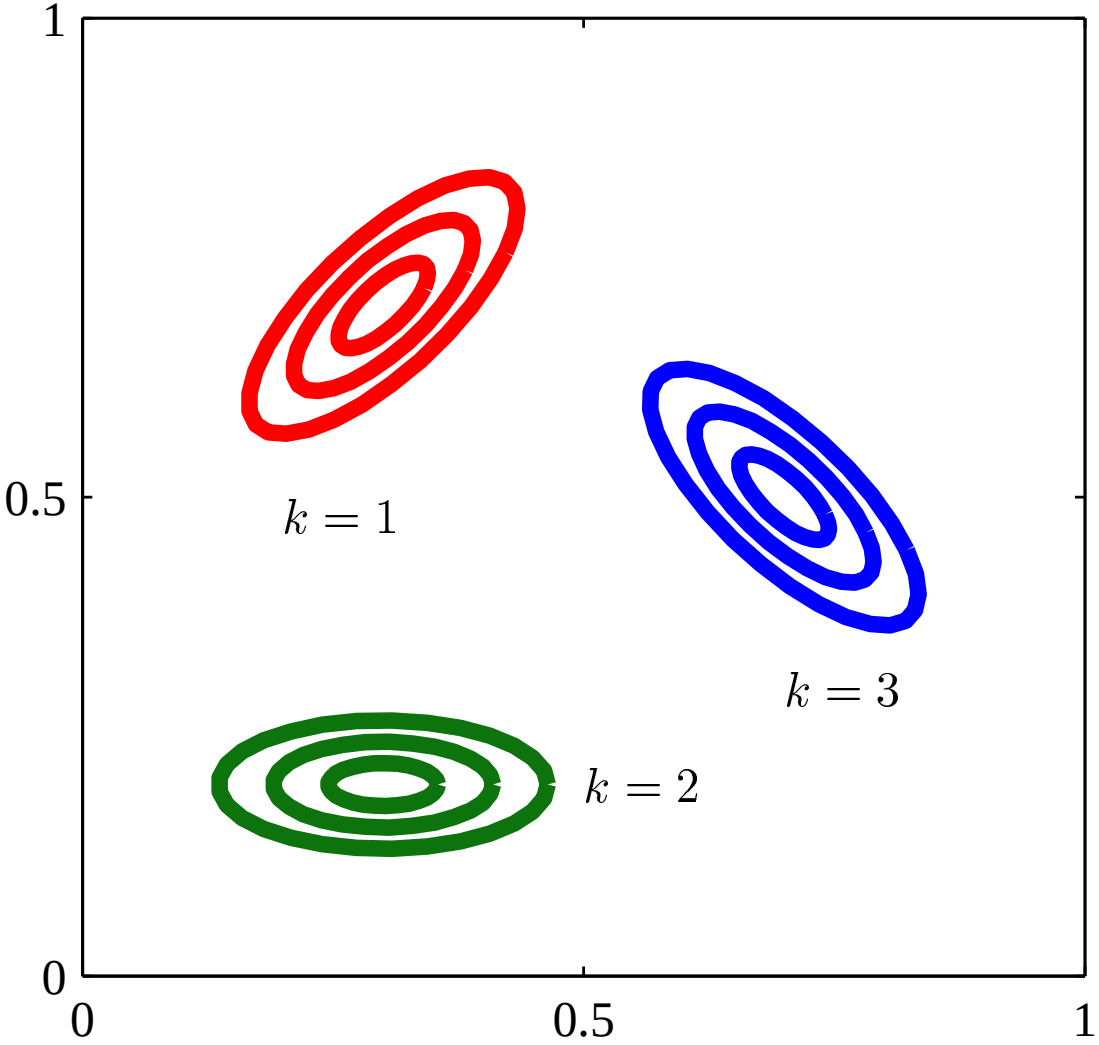


Figure: Chapter 13, Figure 8a

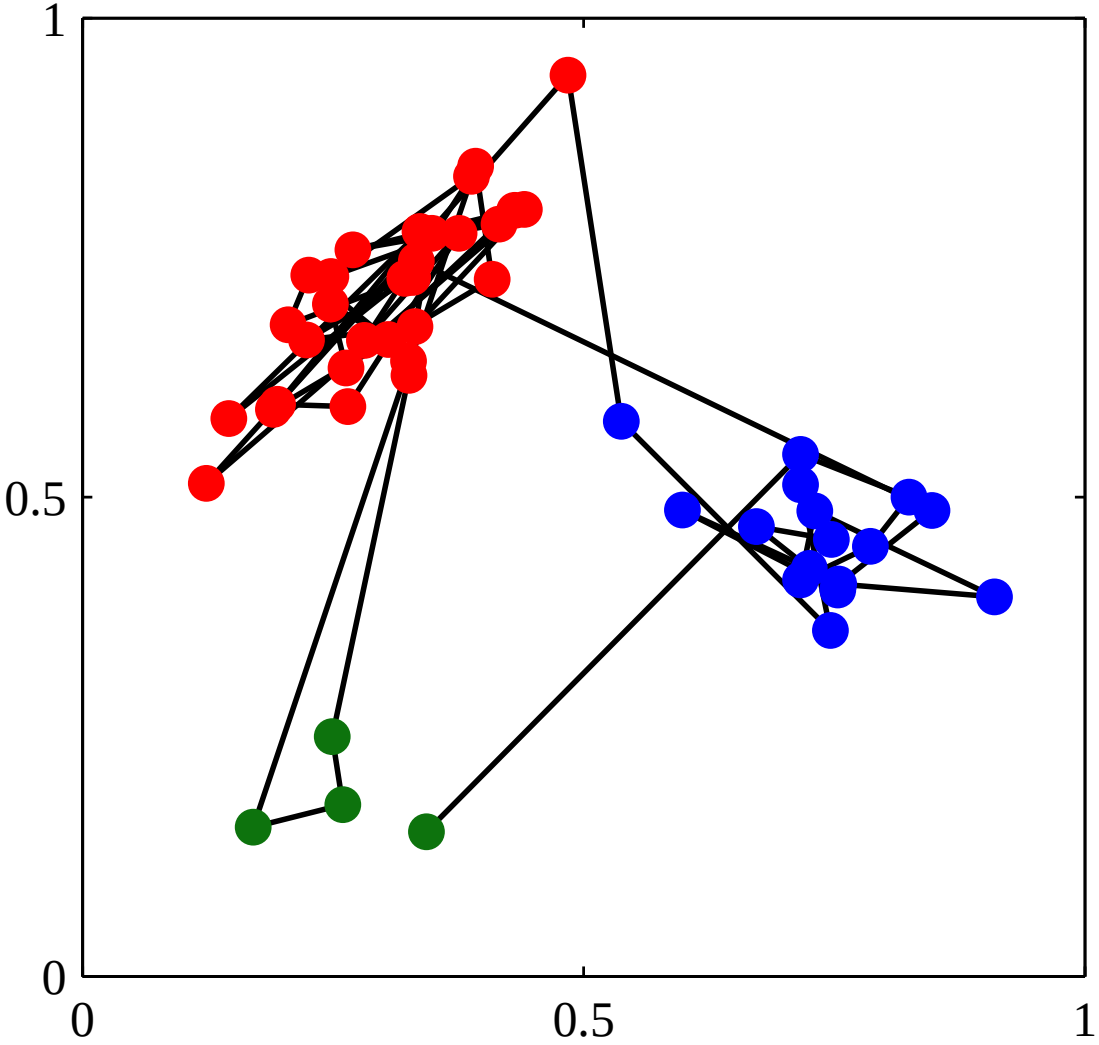


Figure: Chapter 13, Figure 8b

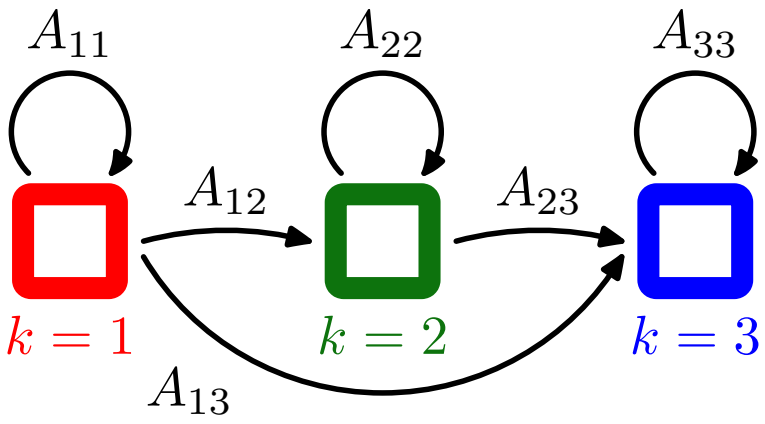
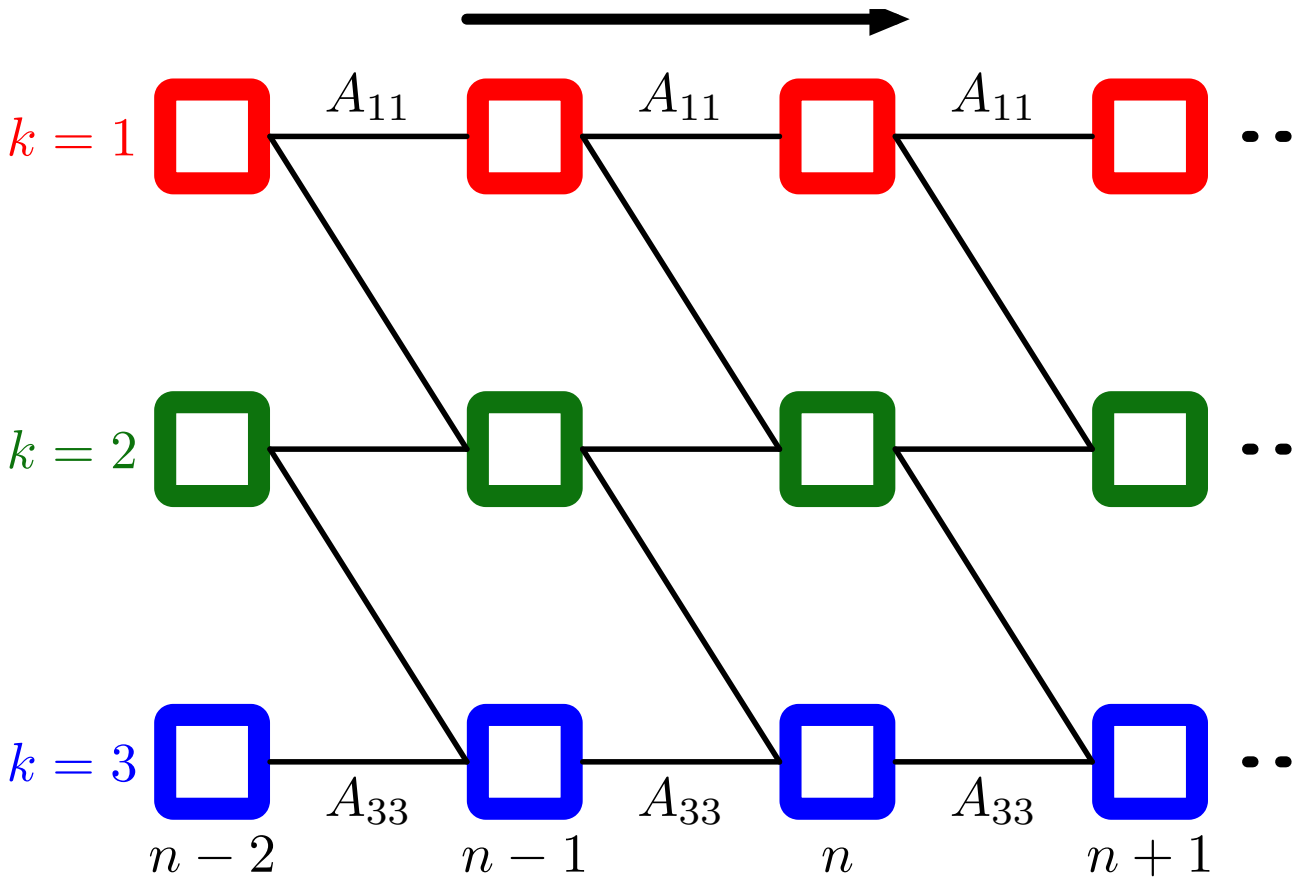


Figure: Chapter 13, Figure 9



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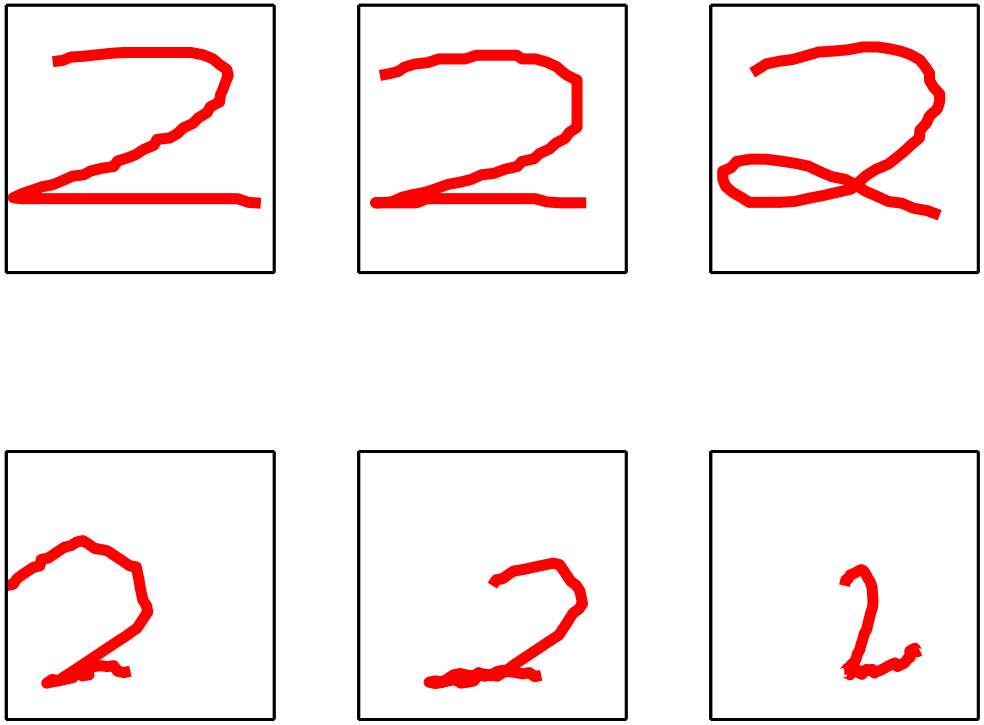
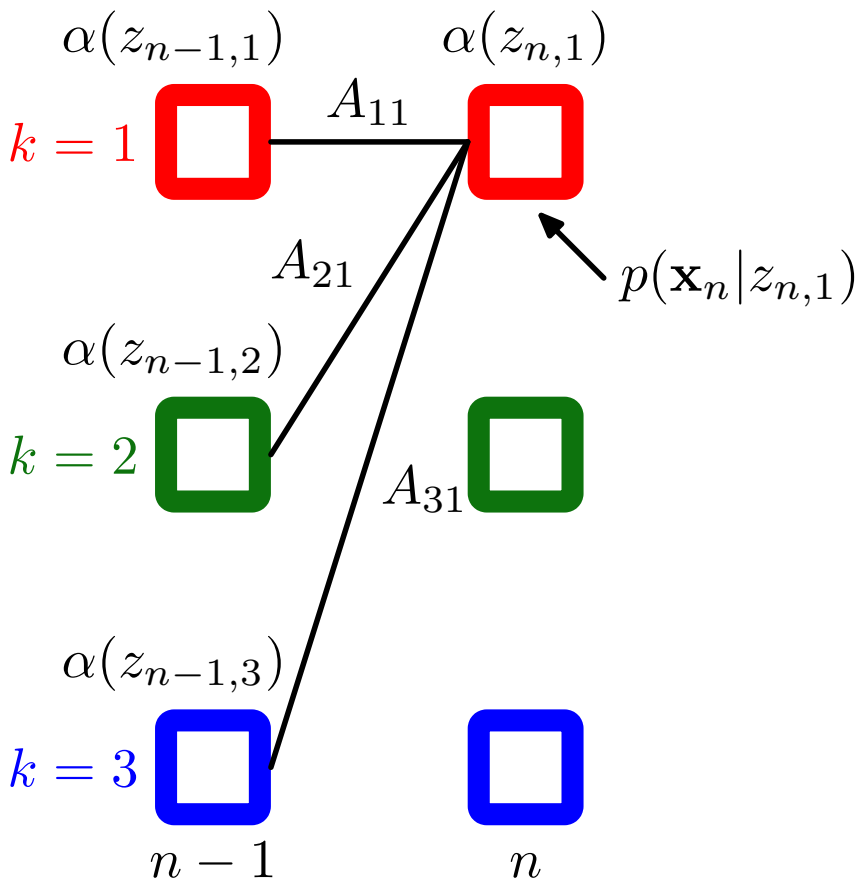


Figure: Chapter 13, Figure 11



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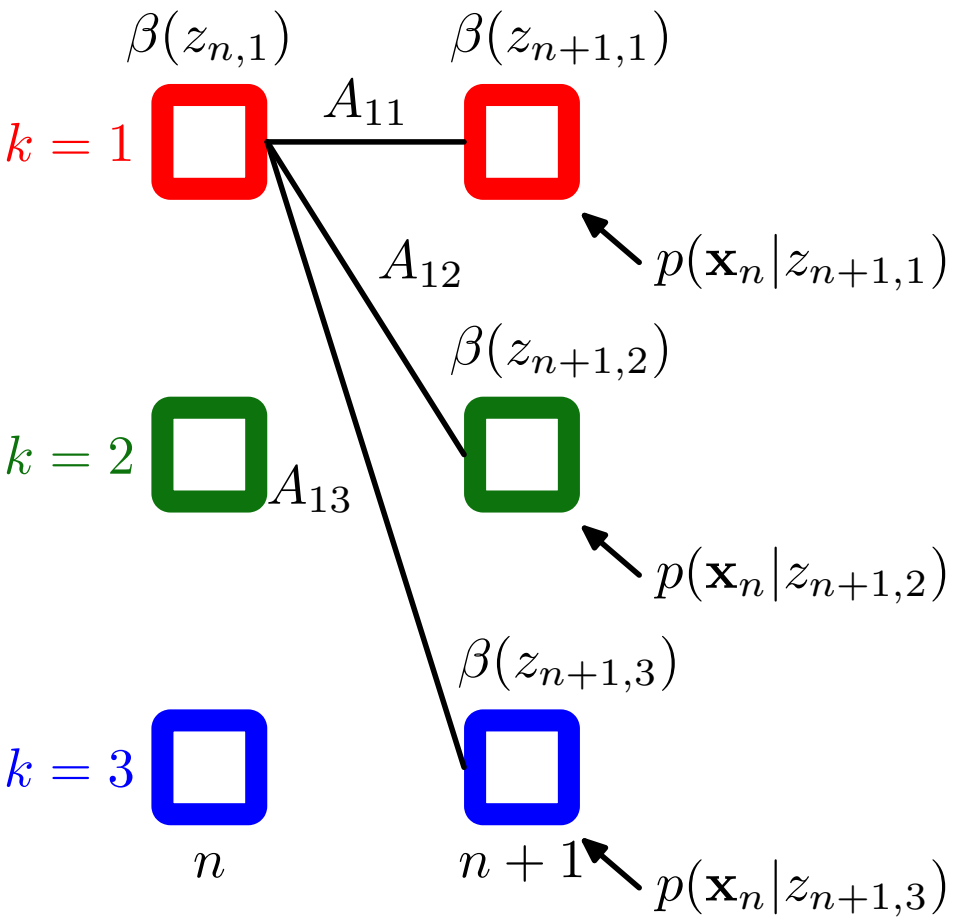

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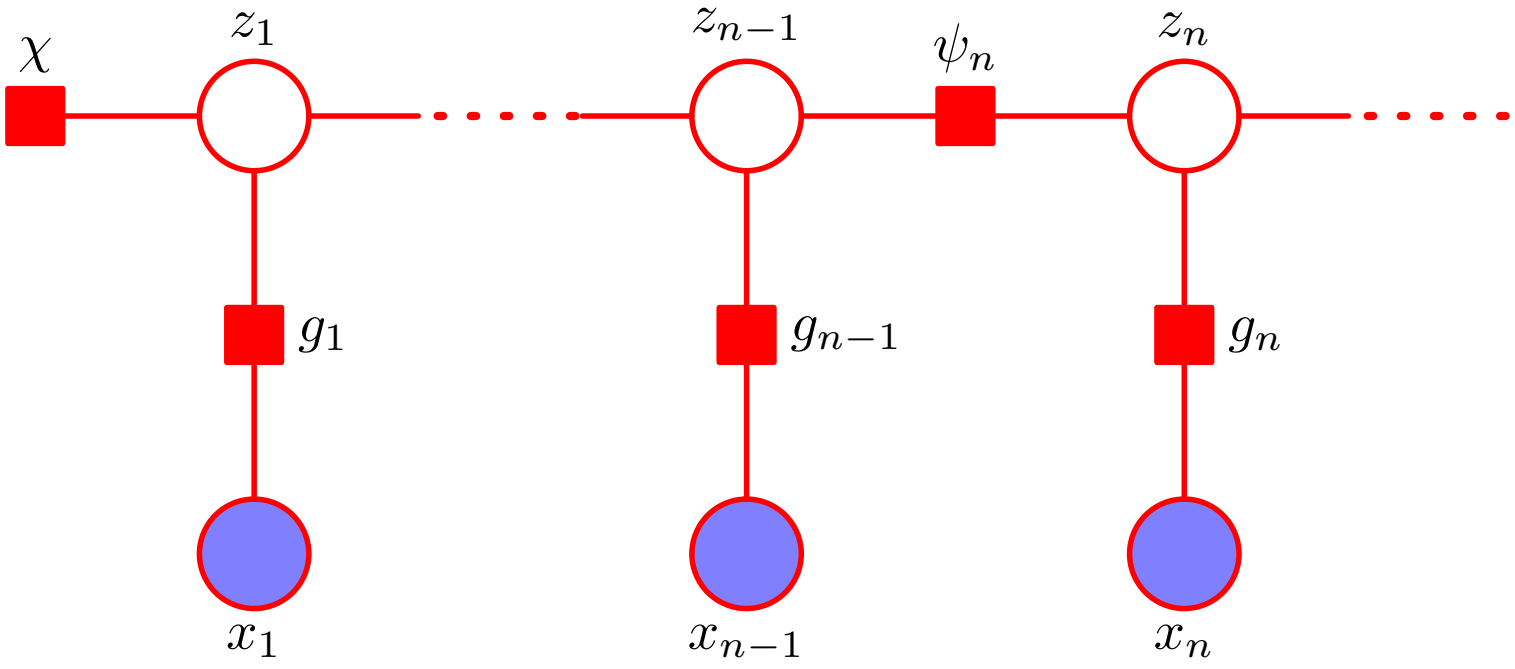

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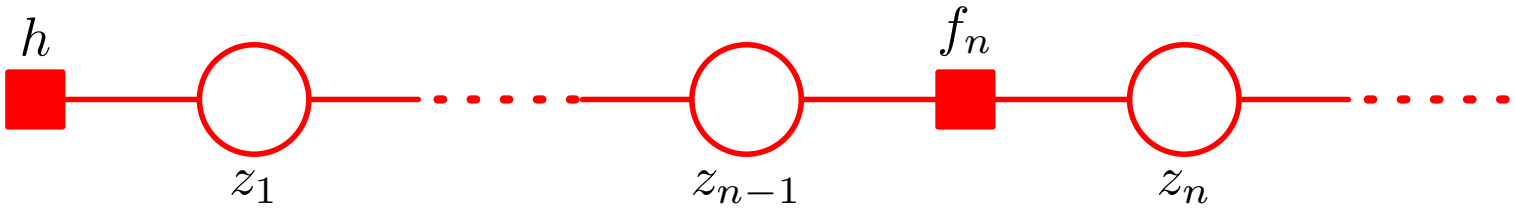

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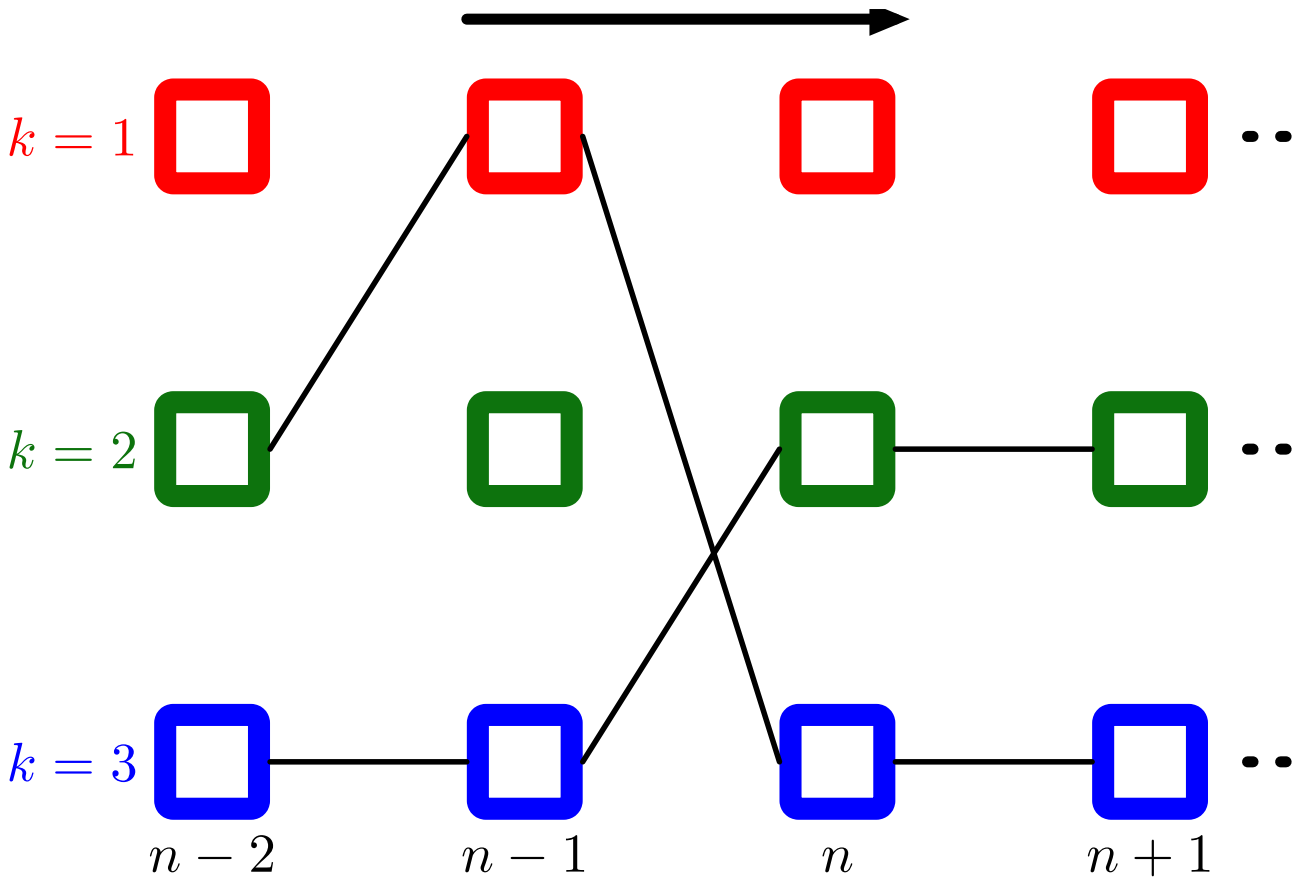

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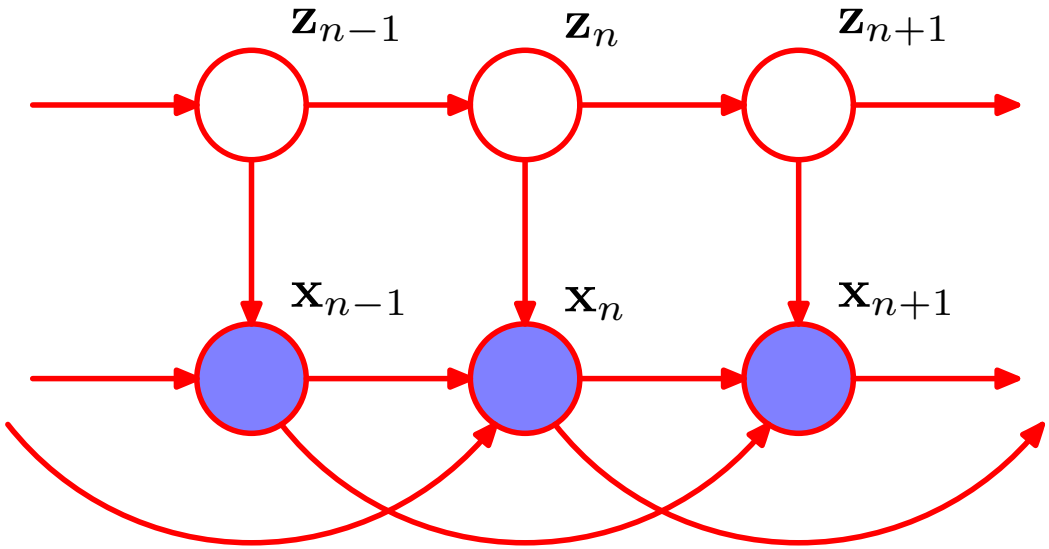

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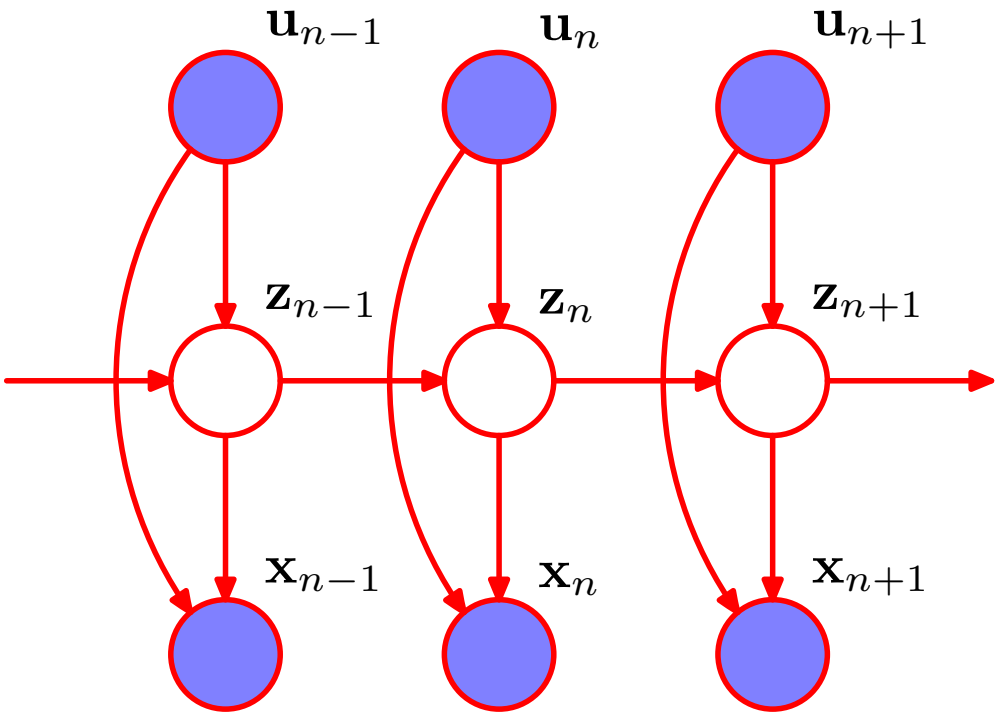

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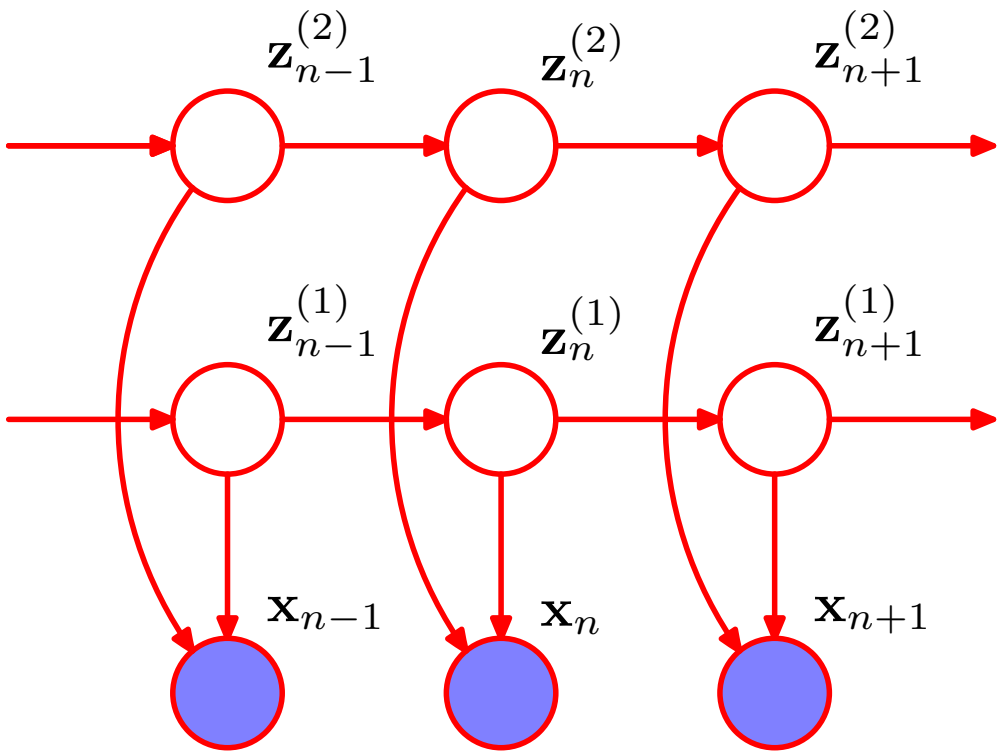

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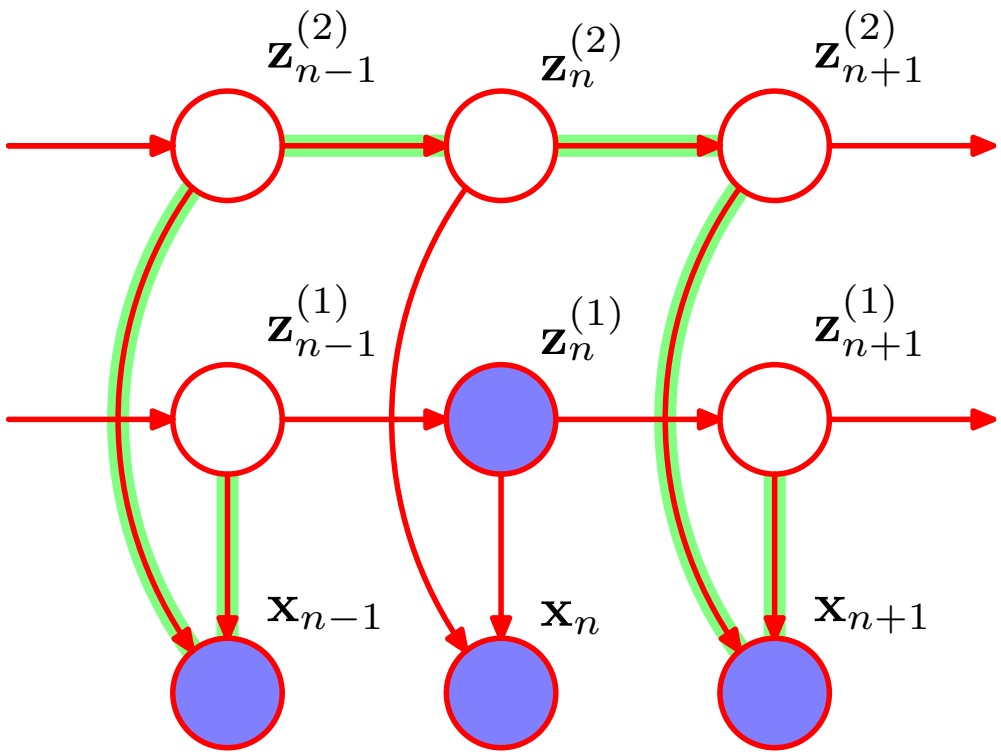


Figure: Chapter 13, Figure 20

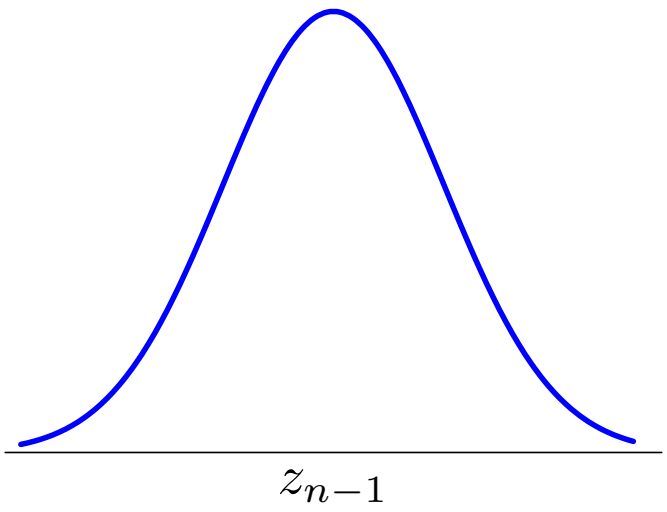


Figure: Chapter 13, Figure 21a

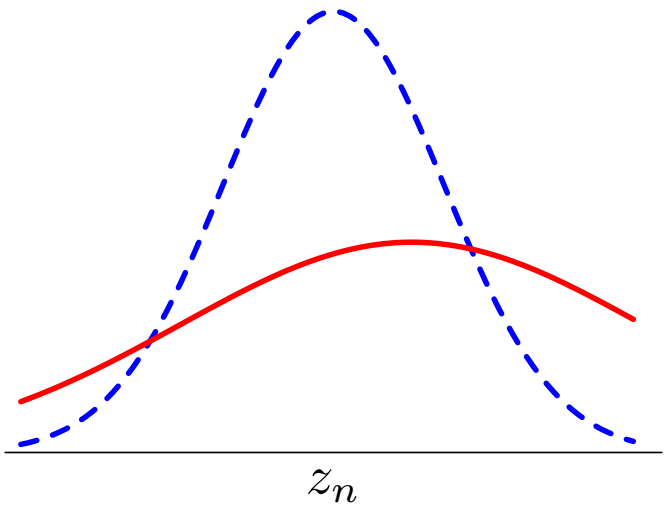


Figure: Chapter 13, Figure 21b

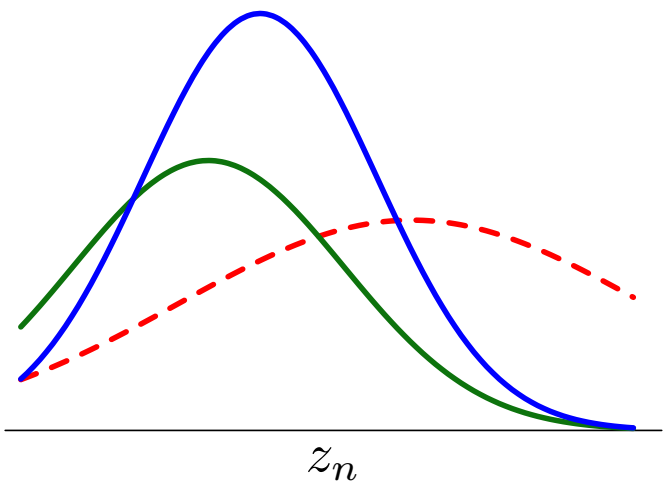
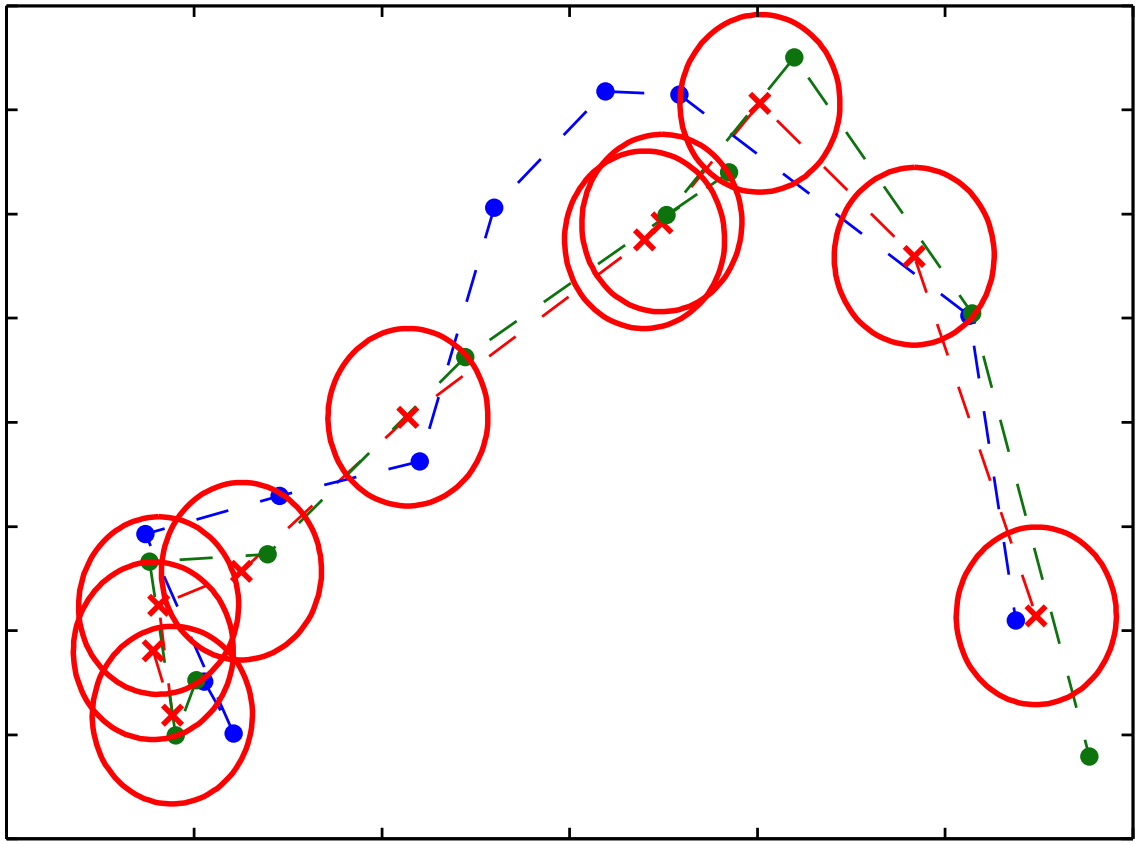


Figure: Chapter 13, Figure 21c



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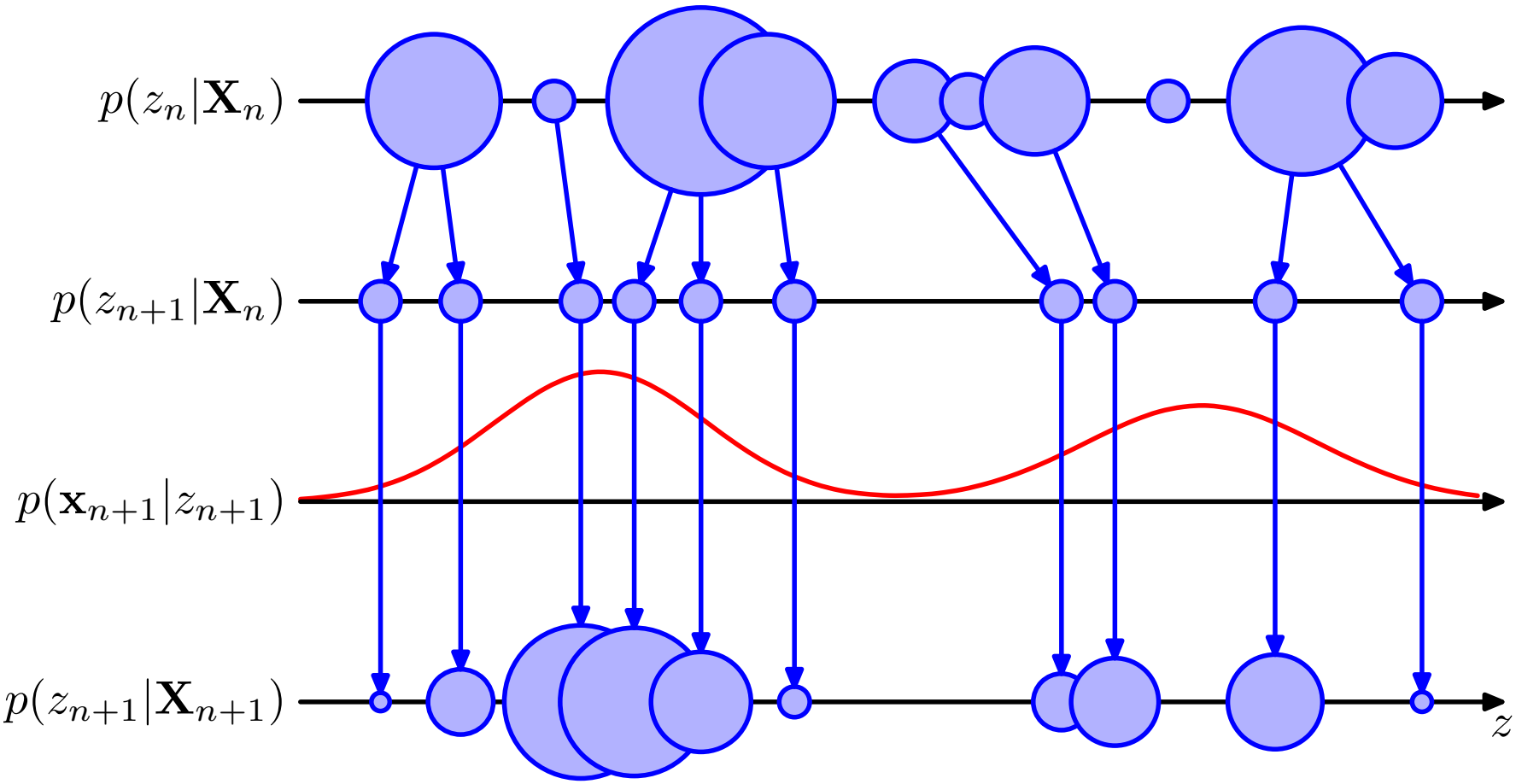
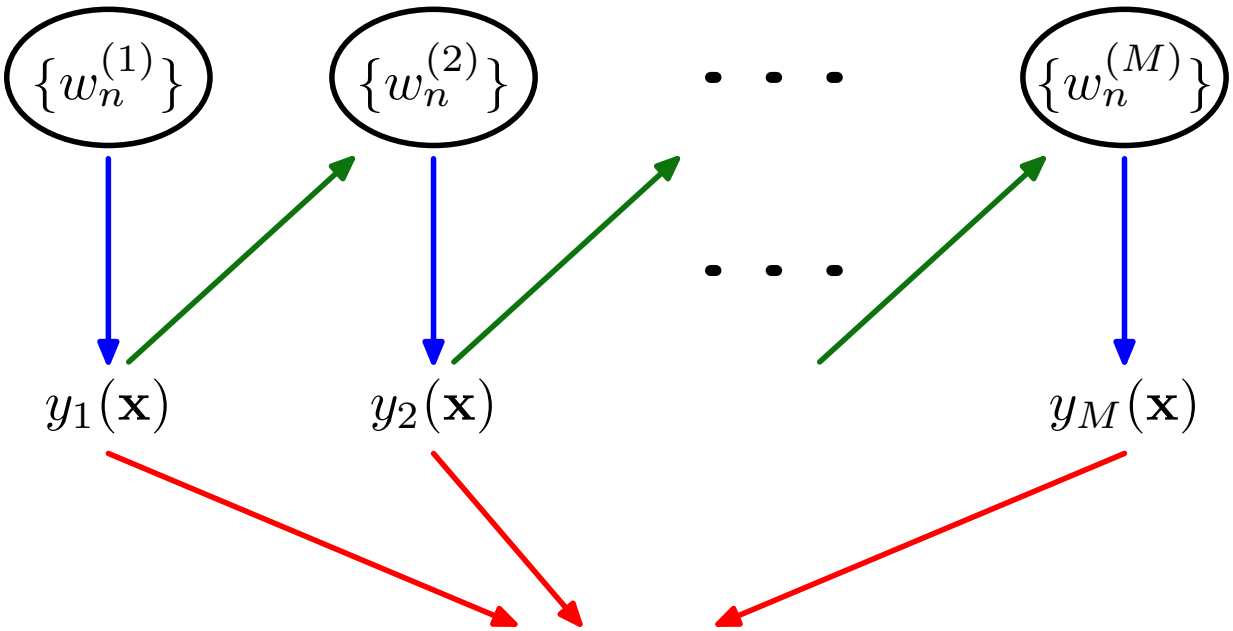


Figure: Chapter 13, Figure 23



$$Y_M(\mathbf{x}) = \text{sign}\left(\sum_m^M \alpha_m y_m(\mathbf{x})\right)$$

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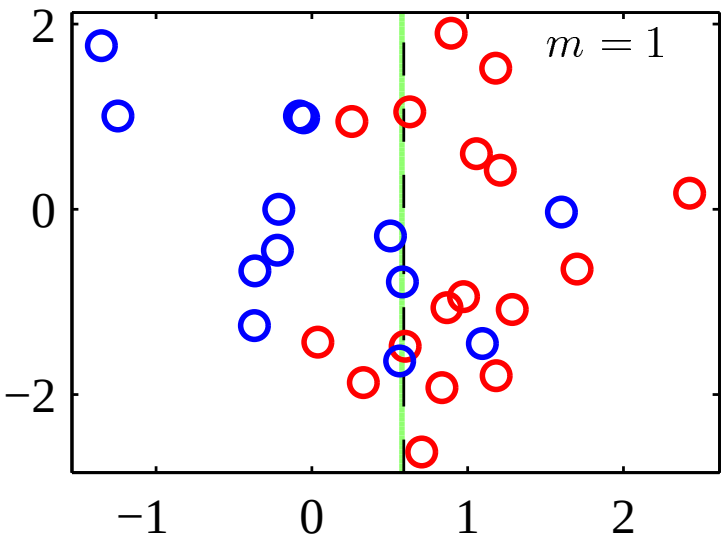


Figure: Chapter 14, Figure 2a

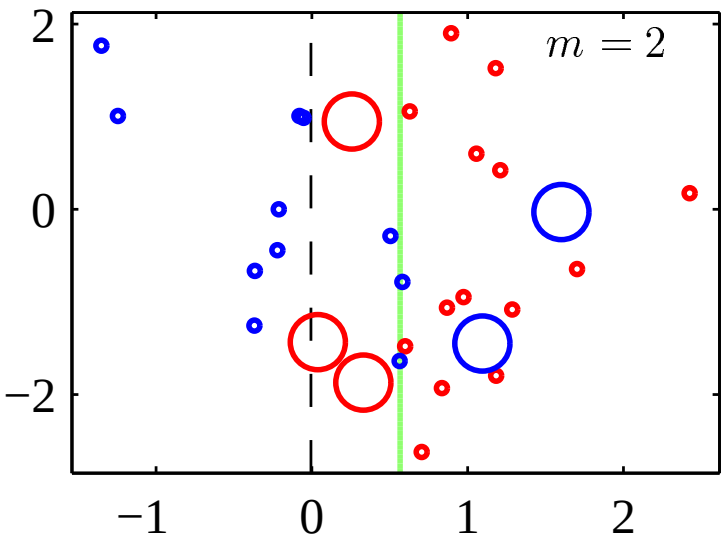


Figure: Chapter 14, Figure 2b

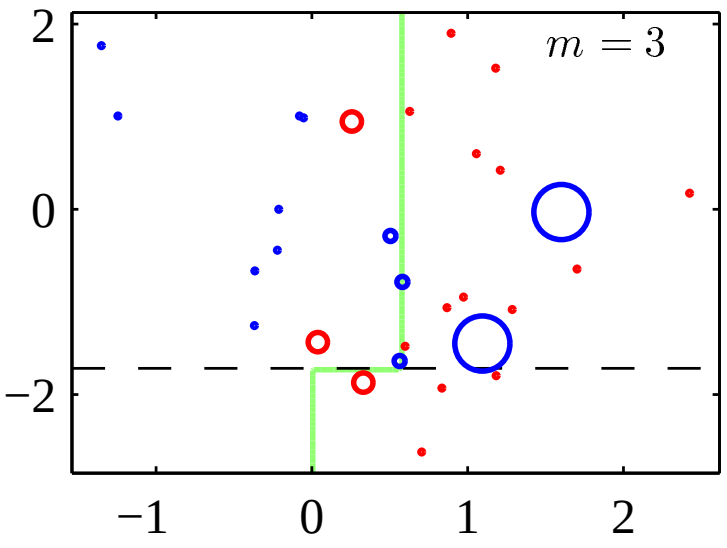


Figure: Chapter 14, Figure 2c

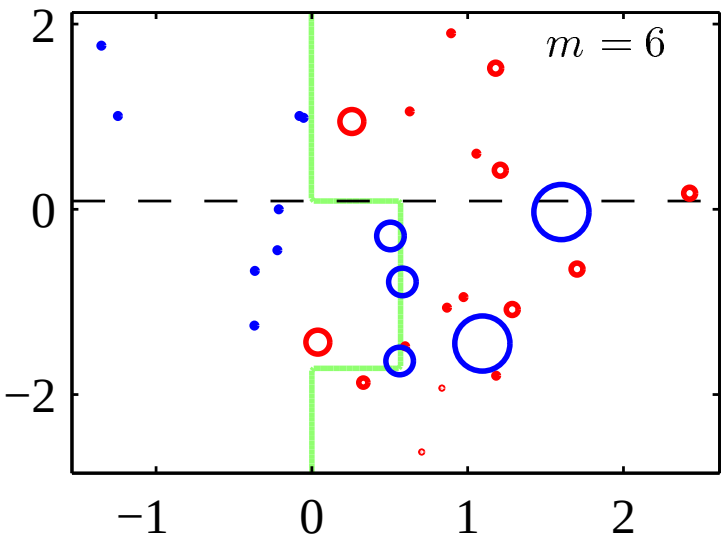


Figure: Chapter 14, Figure 2d

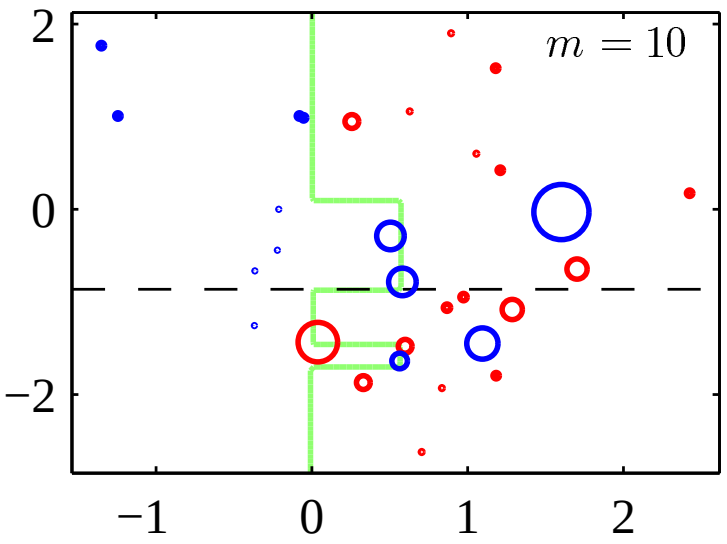


Figure: Chapter 14, Figure 2e

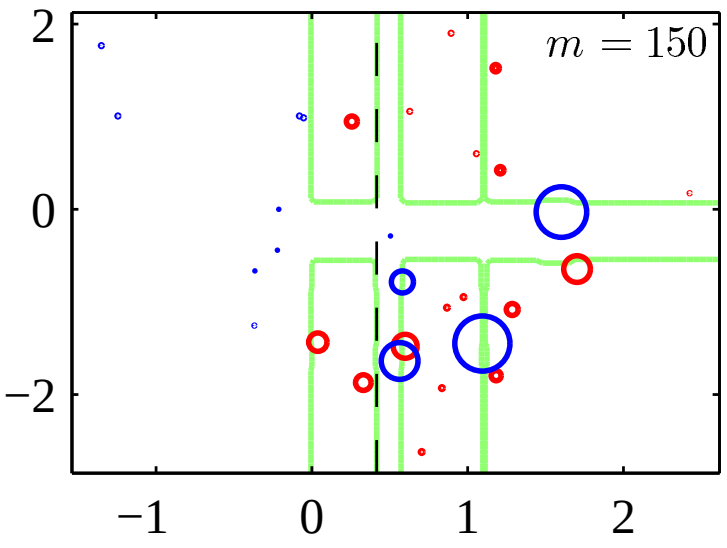


Figure: Chapter 14, Figure 2f

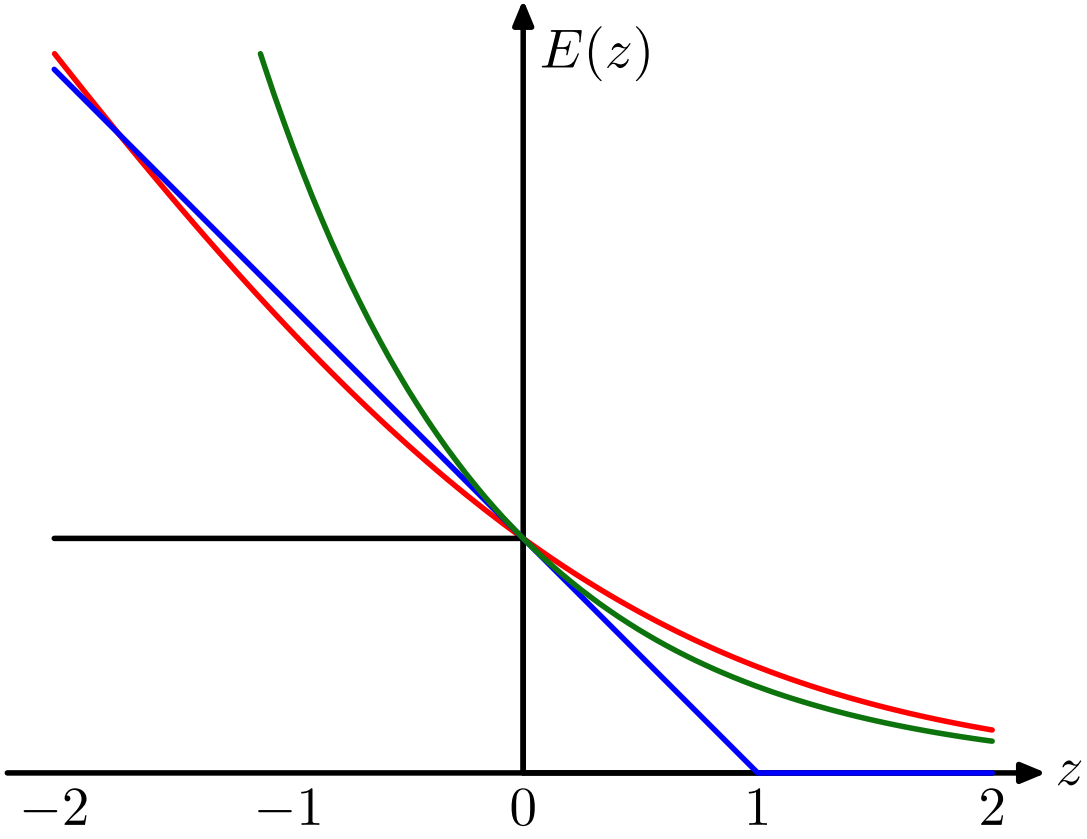


Figure: Chapter 14, Figure 3

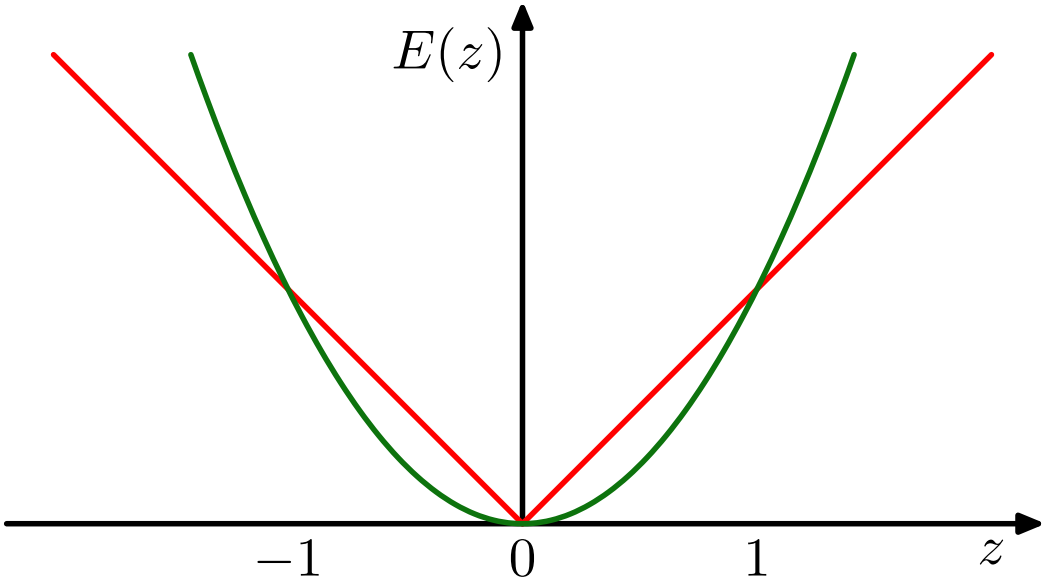


Figure: Chapter 14, Figure 4

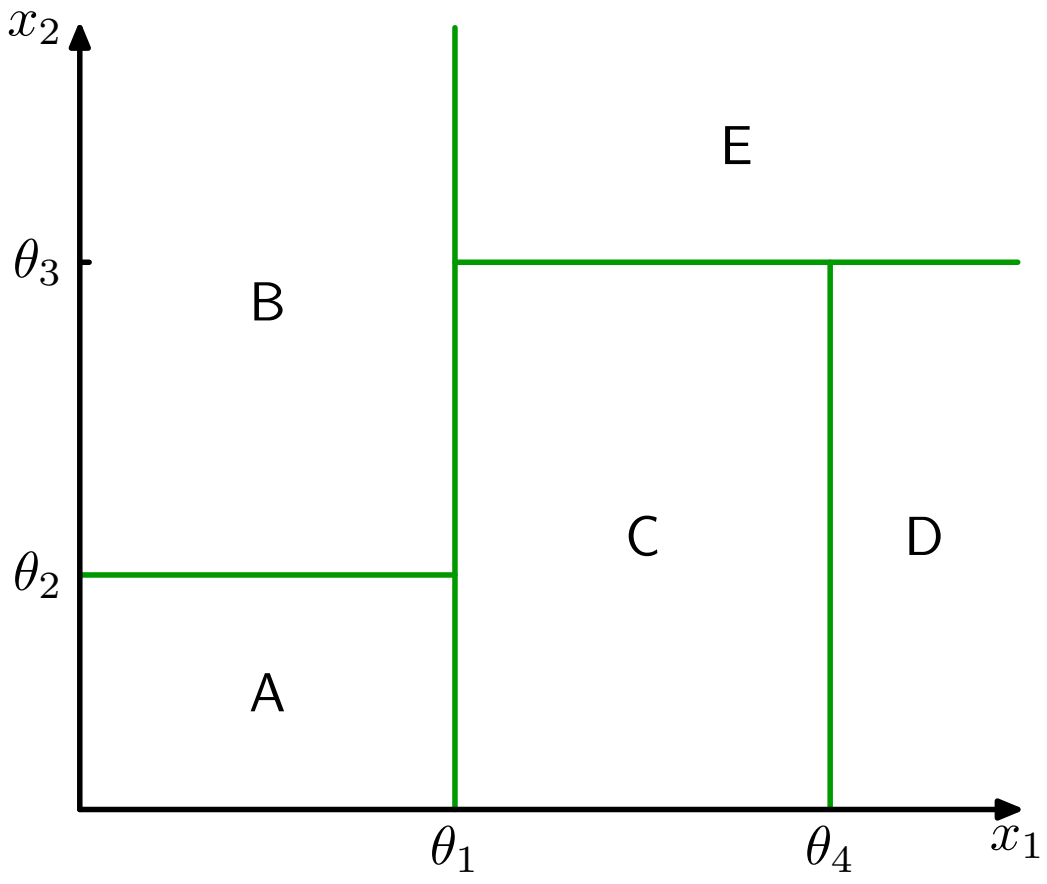


Figure: Chapter 14, Figure 5

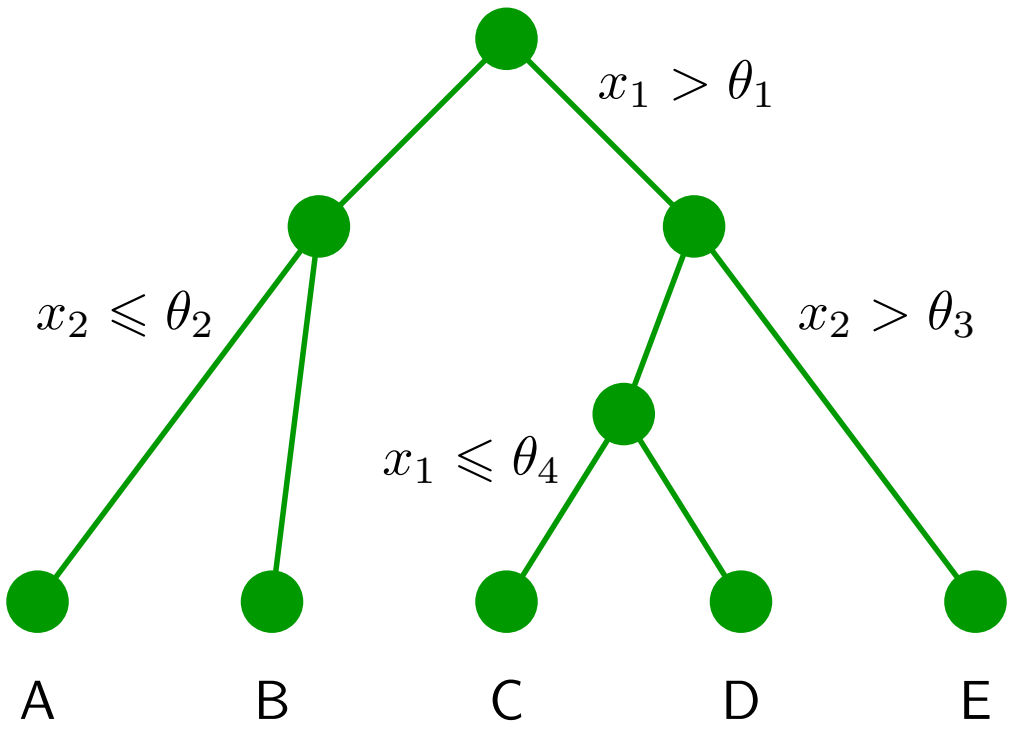


Figure: Chapter 14, Figure 6

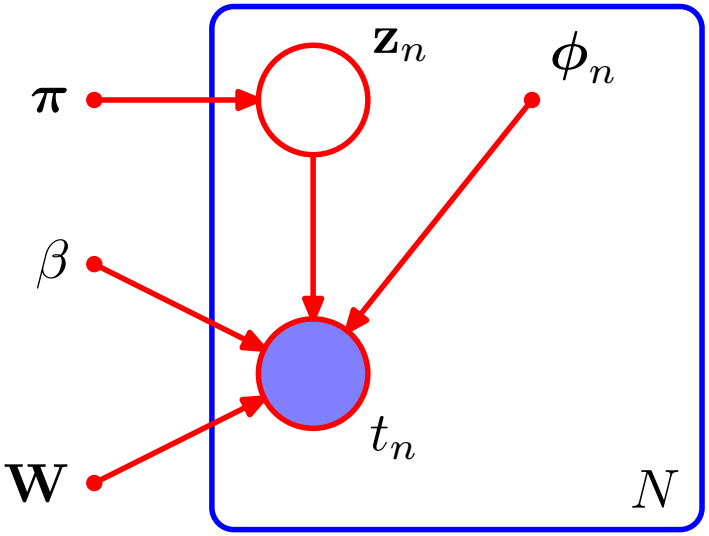


Figure: Chapter 14, Figure 7

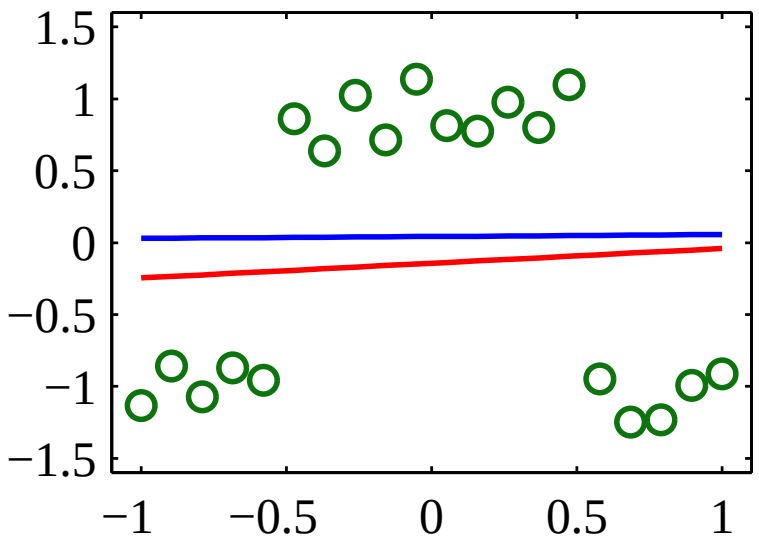


Figure: Chapter 14, Figure 8a

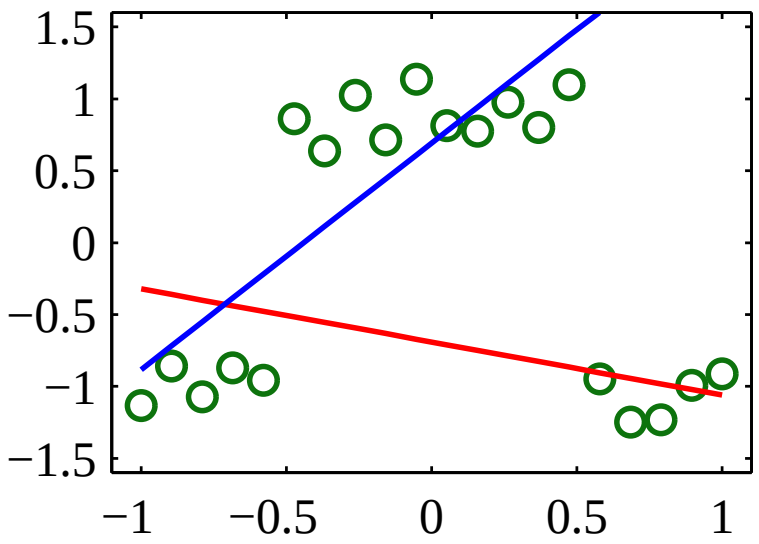


Figure: Chapter 14, Figure 8b

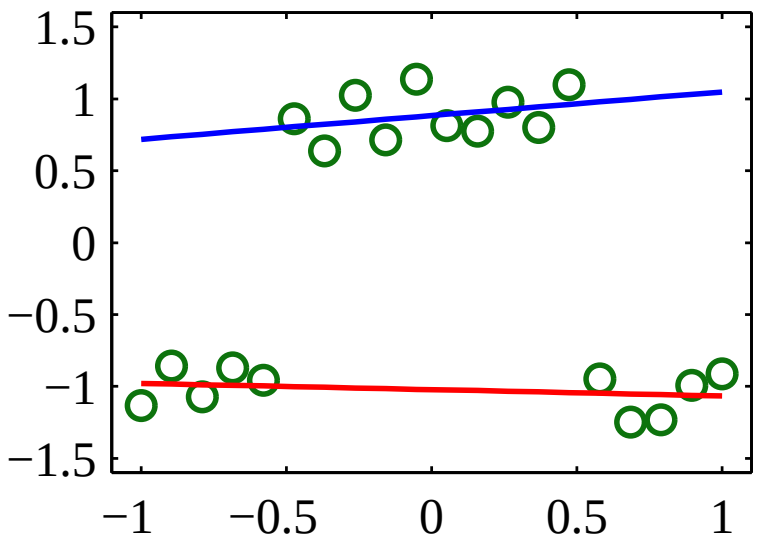


Figure: Chapter 14, Figure 8c

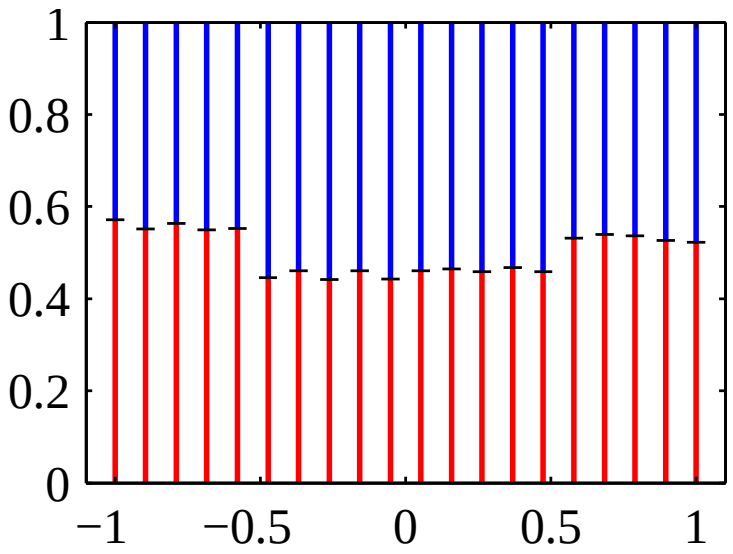
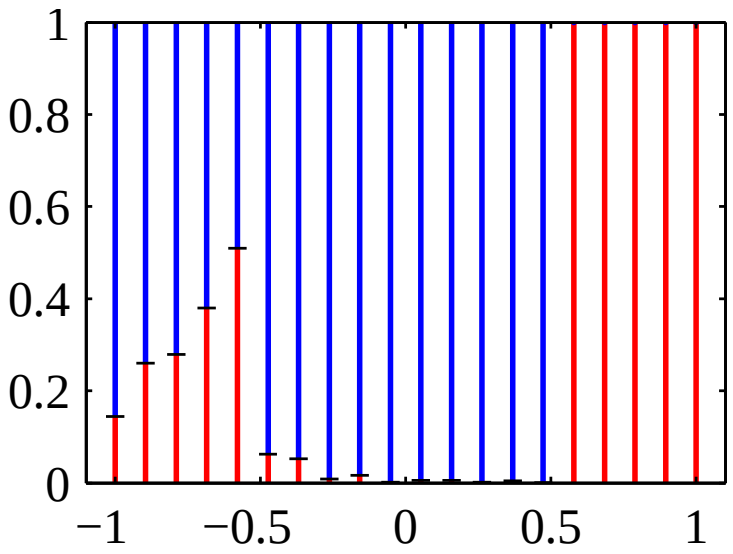


Figure: Chapter 14, Figure 8d



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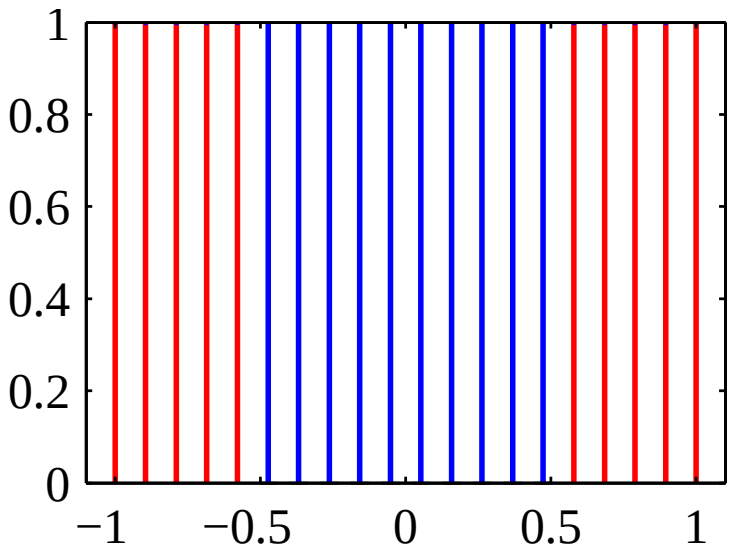

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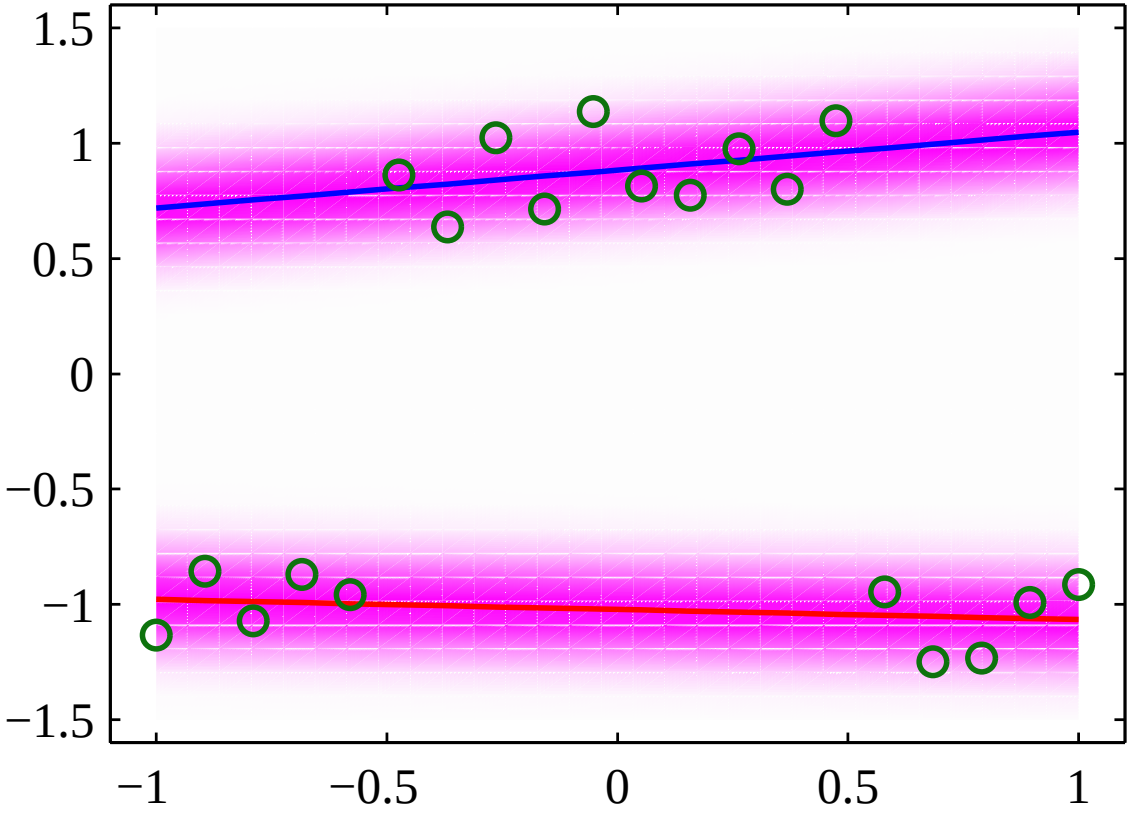

Figure: Chapter 14, Figure 9a

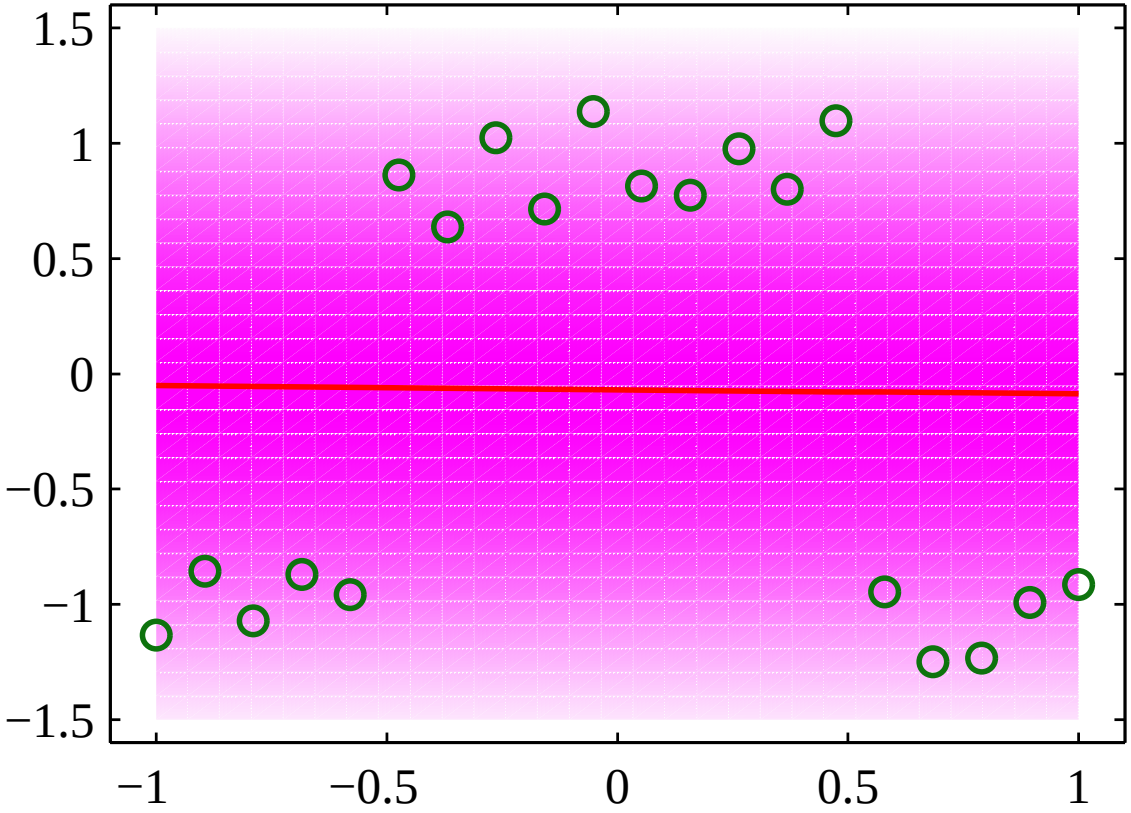

Figure: Chapter 14, Figure 9b

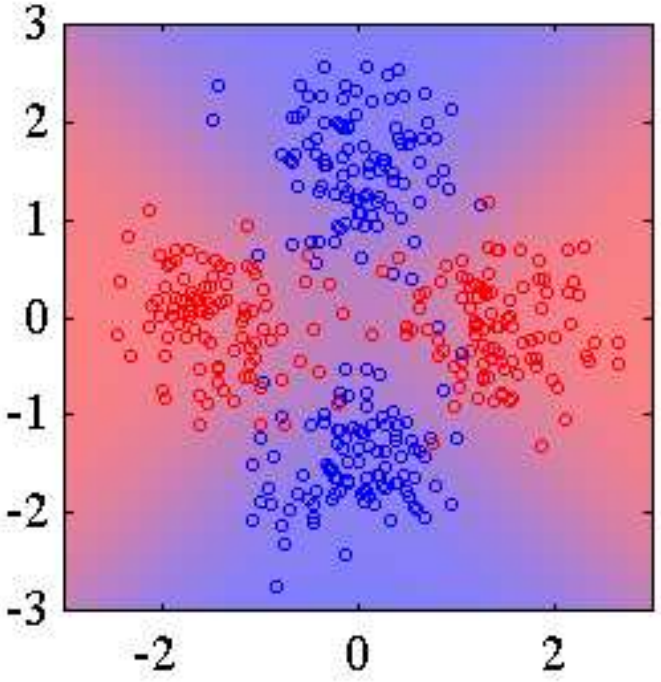

Figure: Chapter 14, Figure 10a

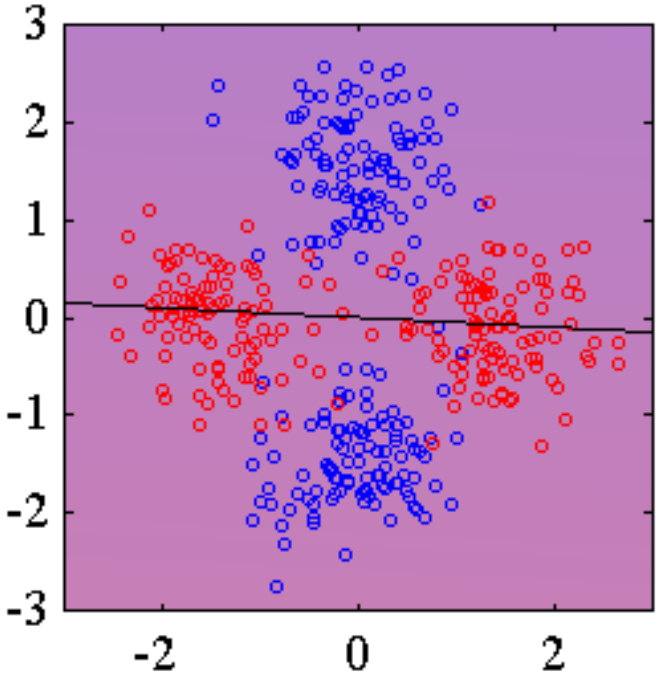

Figure: Chapter 14, Figure 10b

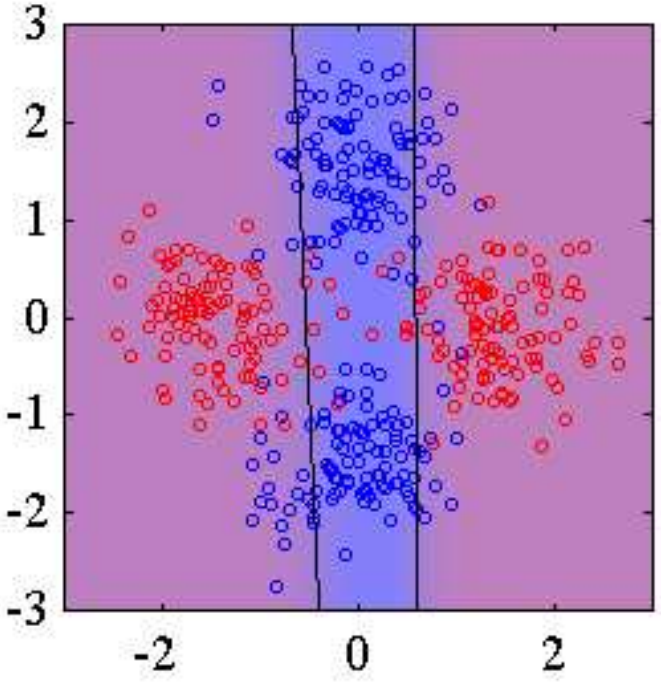

Figure: Chapter 14, Figure 10c

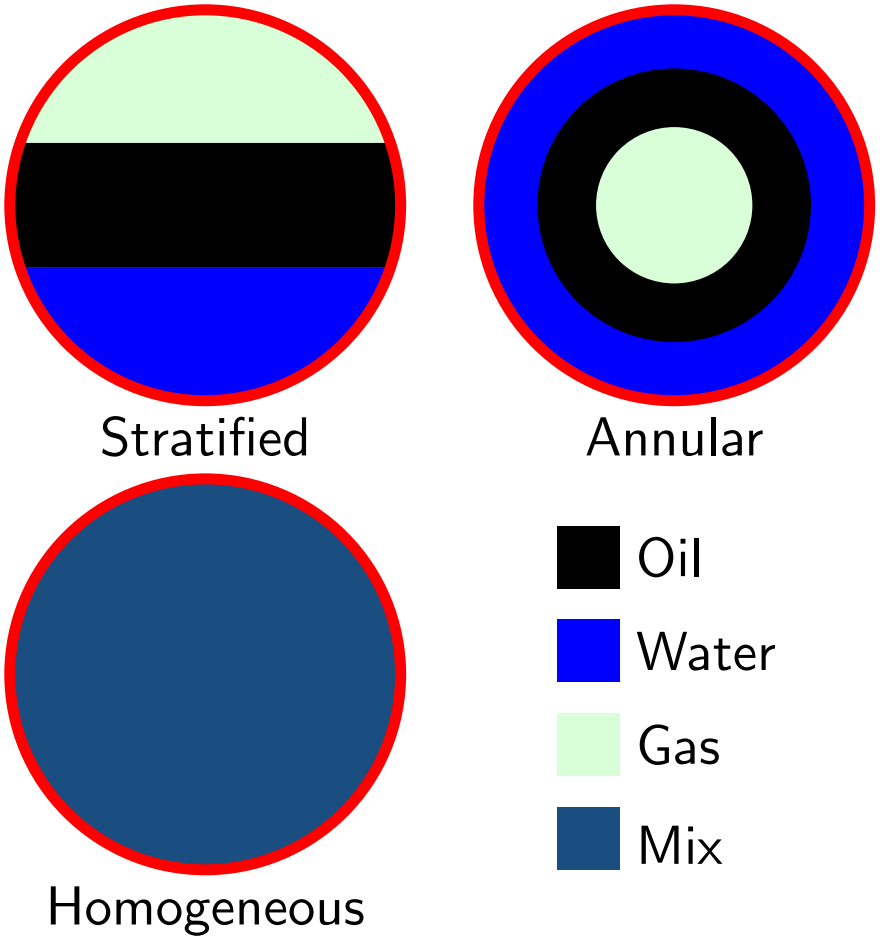

Figure: Chapter A, Figure 2

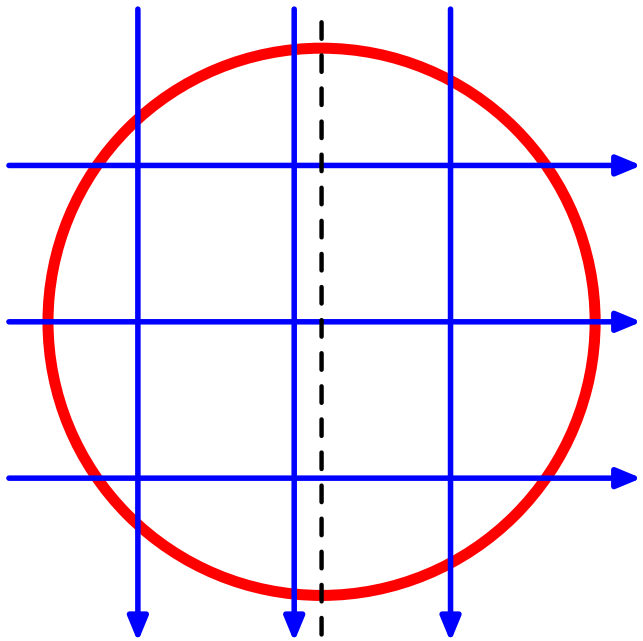

Figure: Chapter A, Figure 3

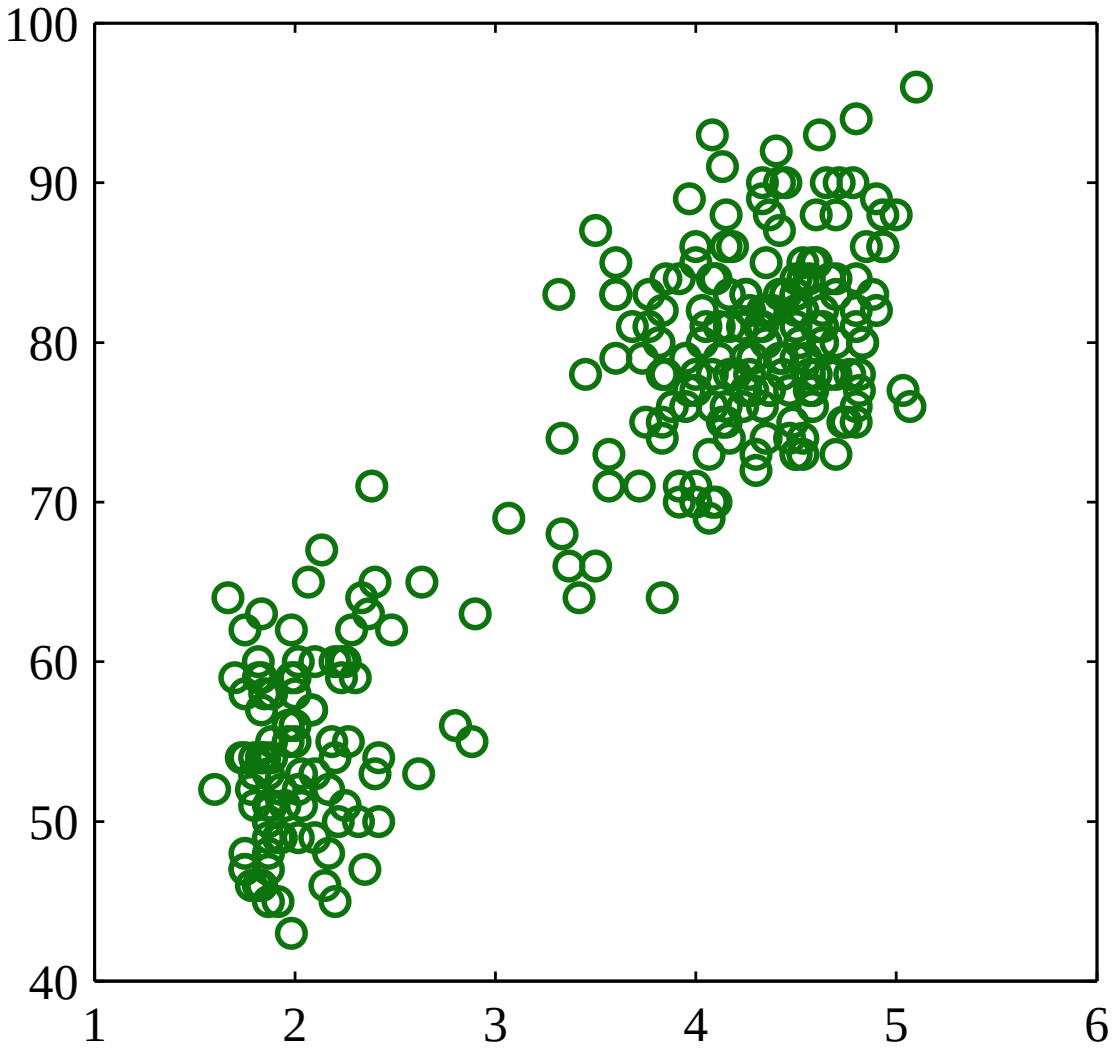

Figure: Chapter A, Figure 5

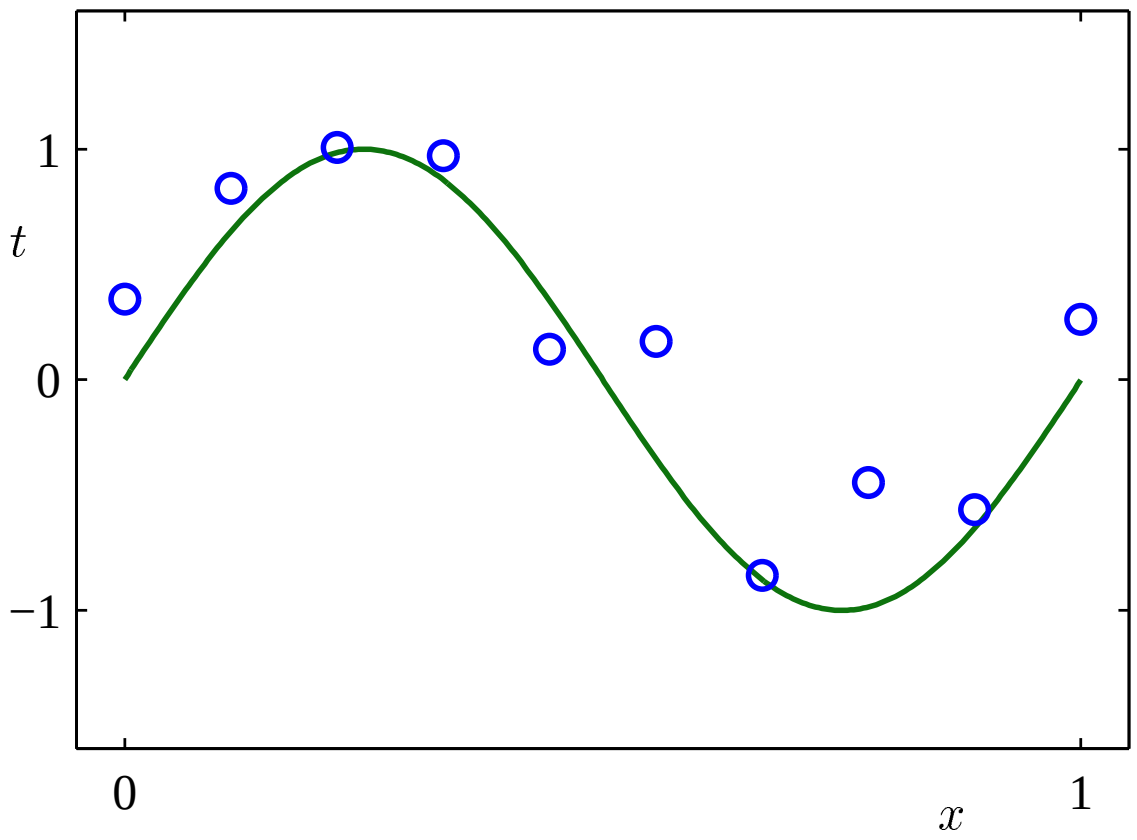

Figure: Chapter A, Figure 6a

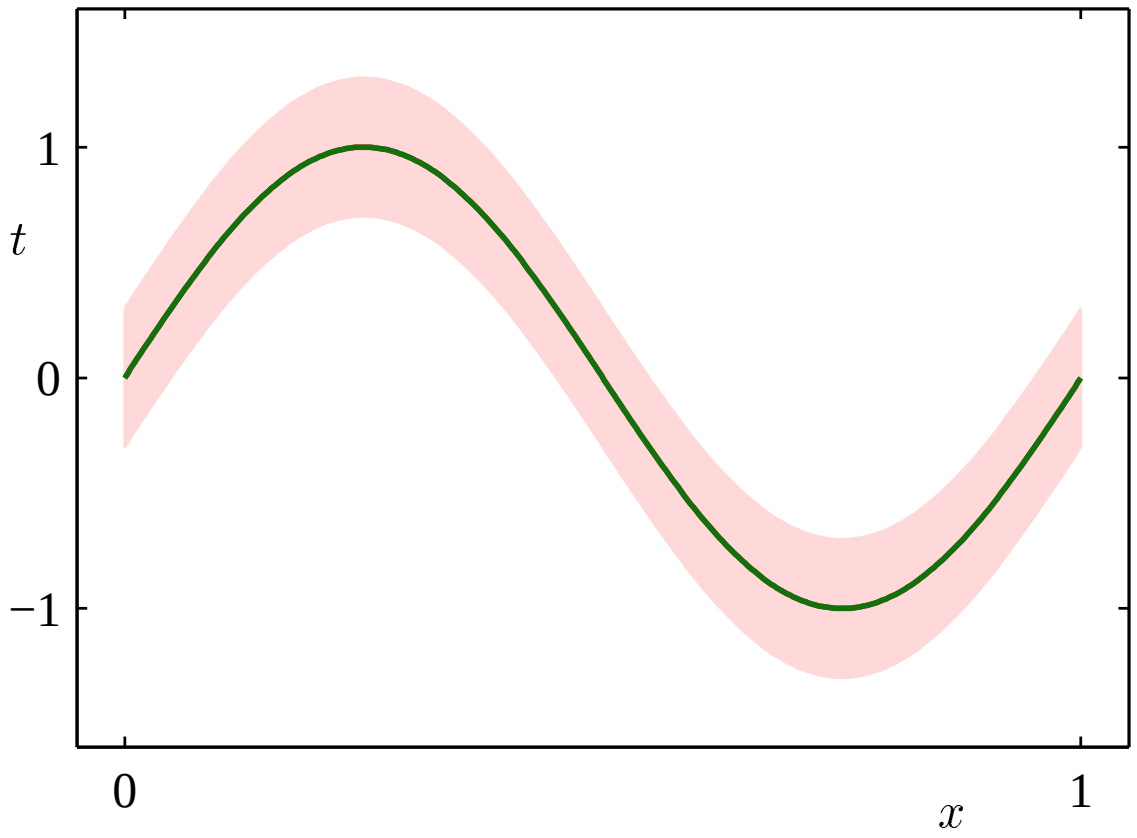

Figure: Chapter A, Figure 6b

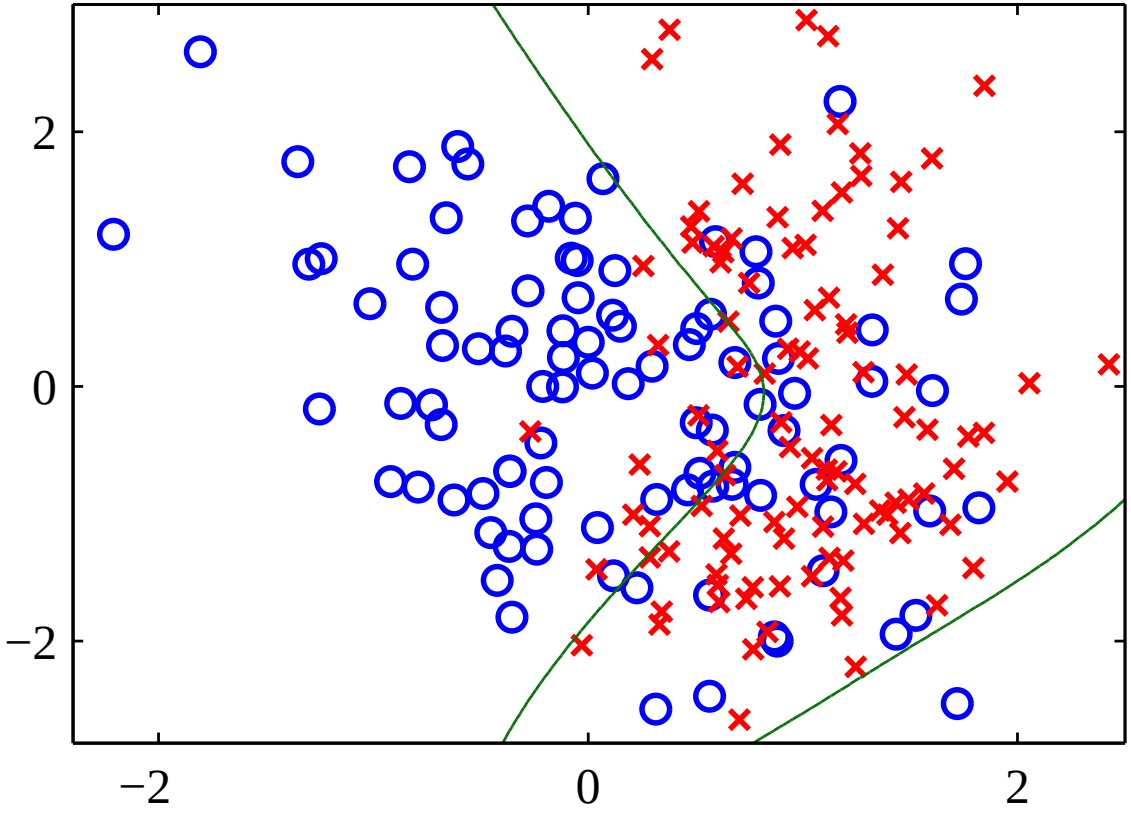

Figure: Chapter A, Figure 7a

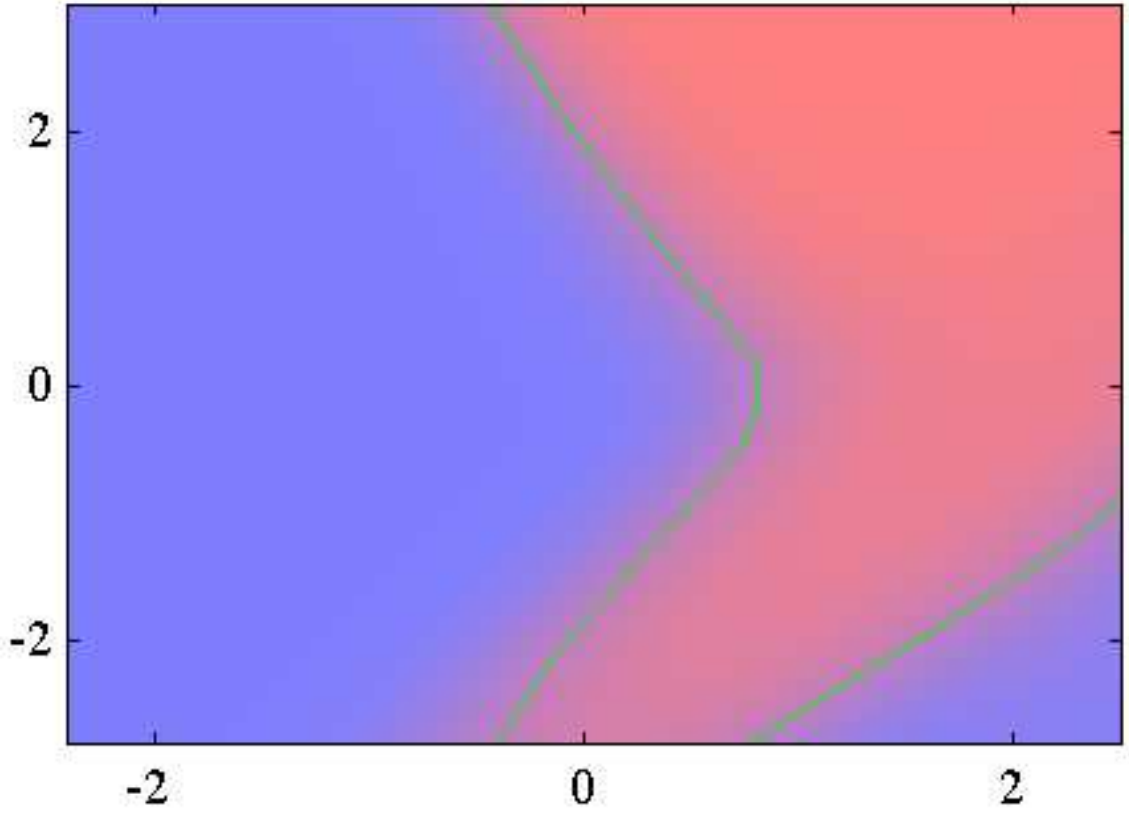

Figure: Chapter A, Figure 7b

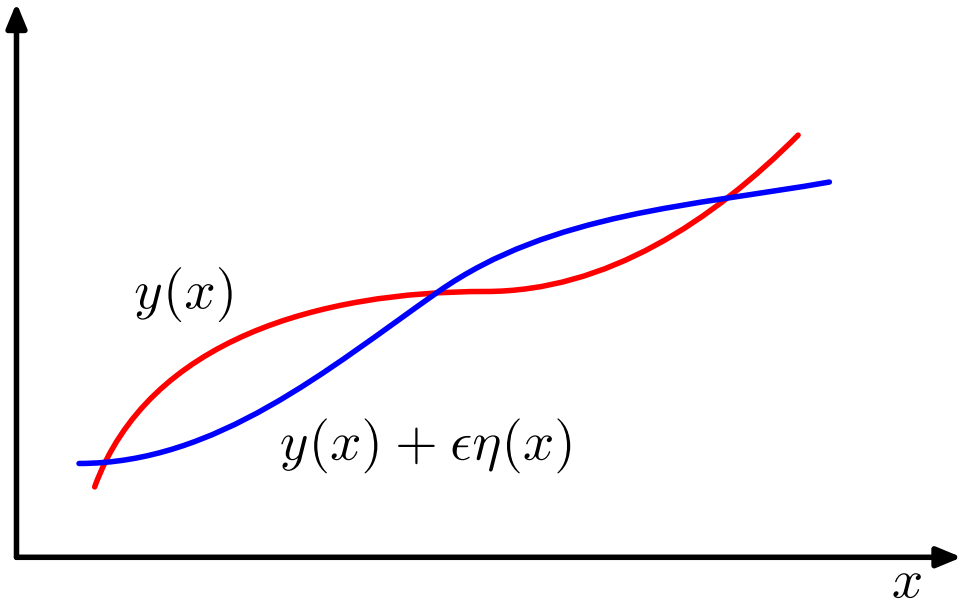

Figure: Chapter D, Figure 1

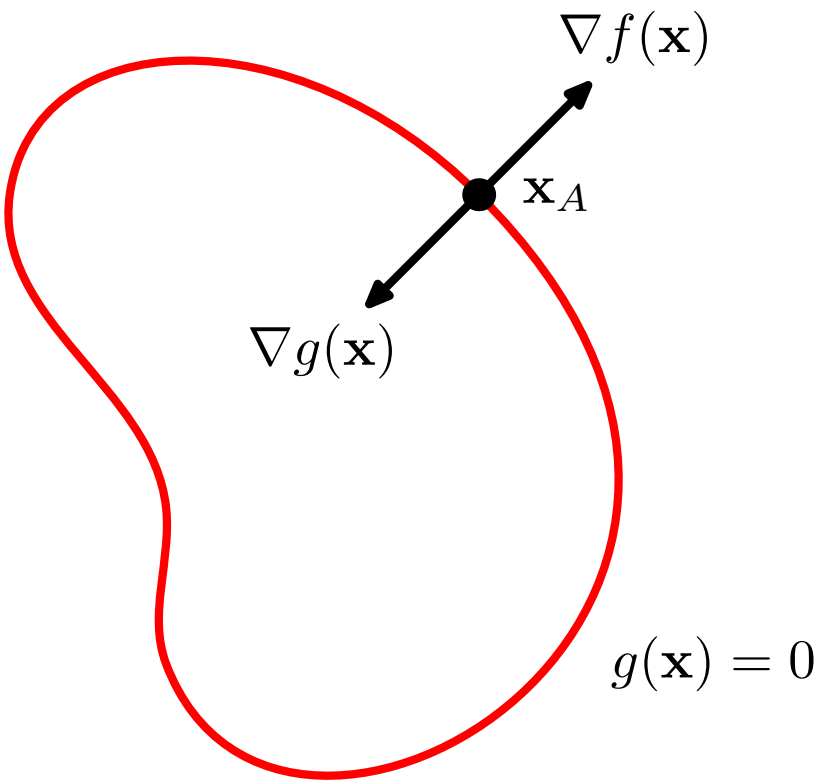

Figure: Chapter E, Figure 1

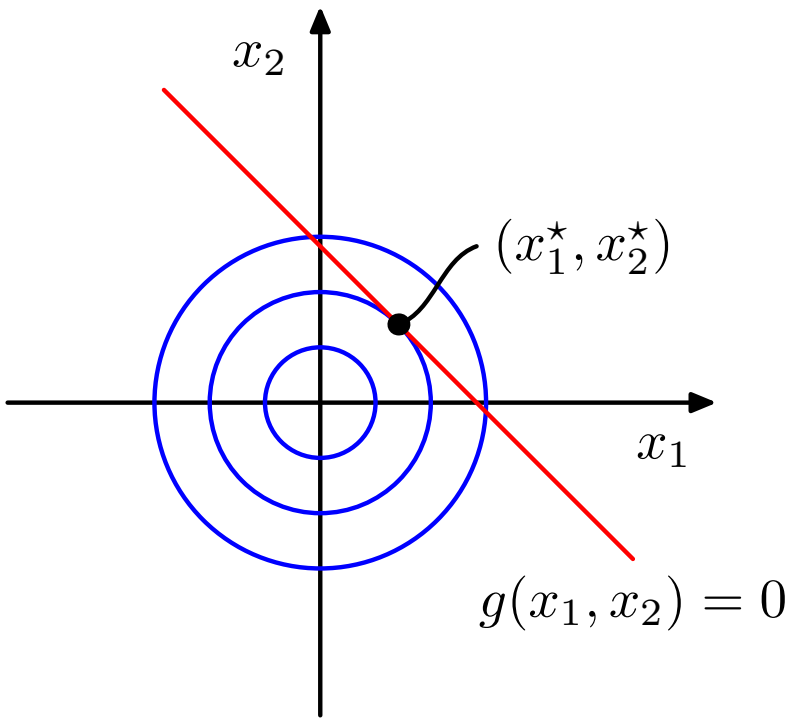

Figure: Chapter E, Figure 2

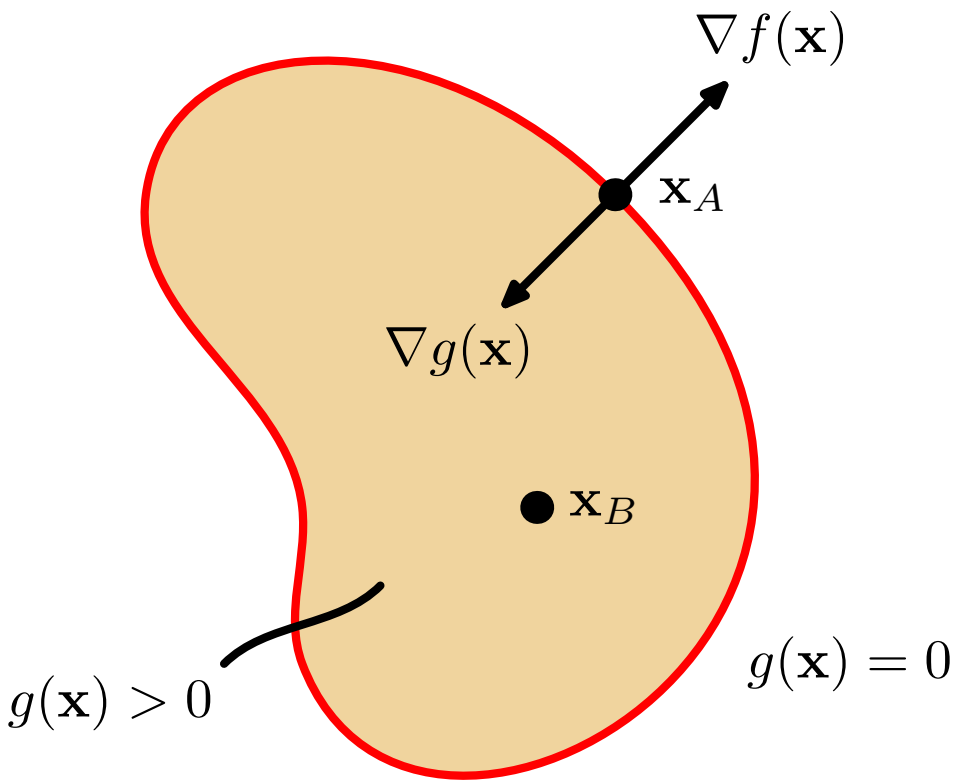

Figure: Chapter E, Figure 3