Bundes-
Blindeninstitut
Wien

LeMa
Lehr- und Lernmaterialien

Tastbare Versionen ausgewählter Grafiken aus dem Schulbuch

Mathematik verstehen 6

Grafiken: Tomáš Baťha

LEMA - Lehr- und Lernmaterialien
Hergestellt von der Abteilung für Inklusion und Lehrmittel am Bundes-Blindeninstitut Wien,
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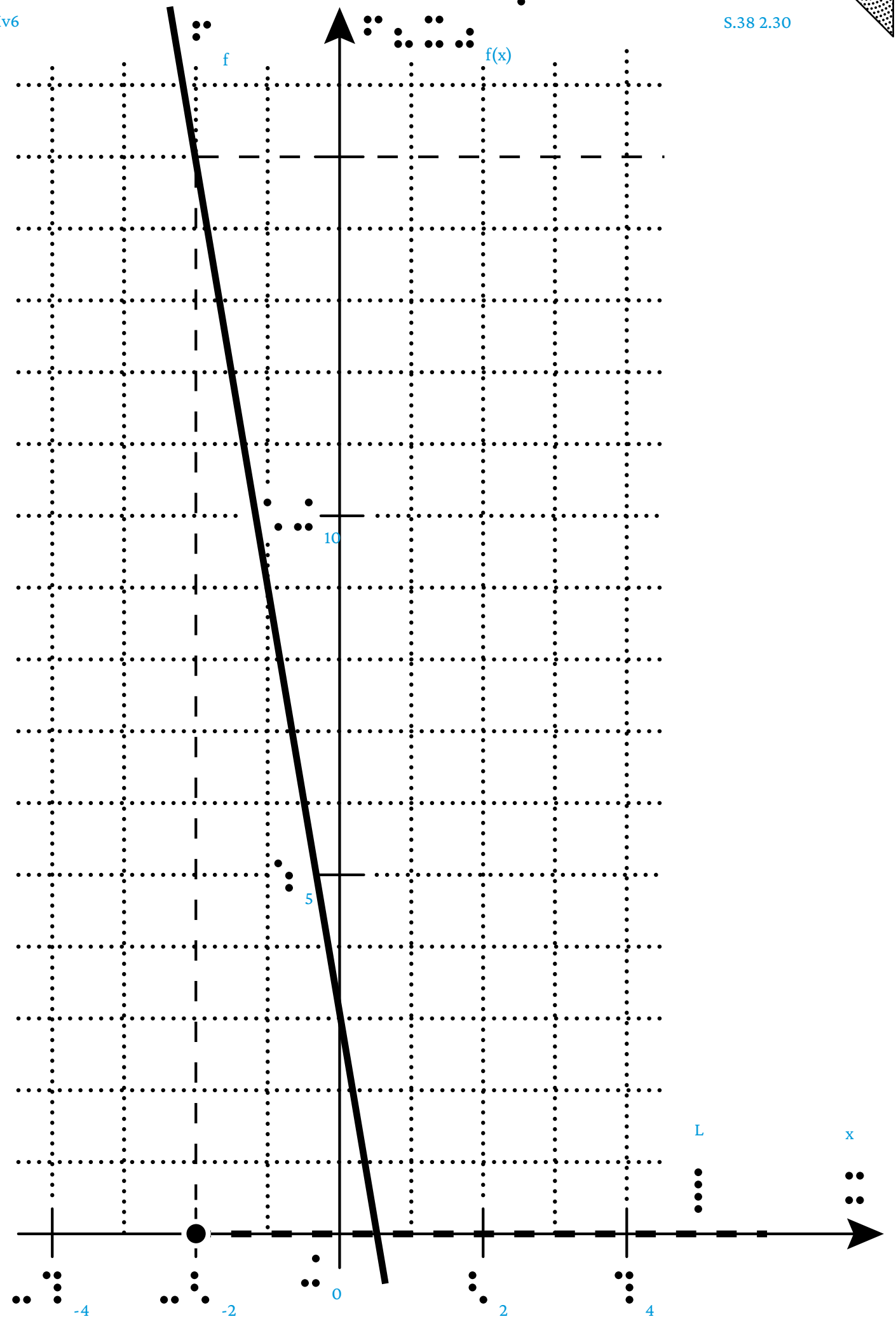
Mathematik verstehen 6

2

Ungleichungen


f
f(x)
10
5
L
x
-4
-2
0
2
4

Mathematik verstehen 6

3

Reele Funktionen

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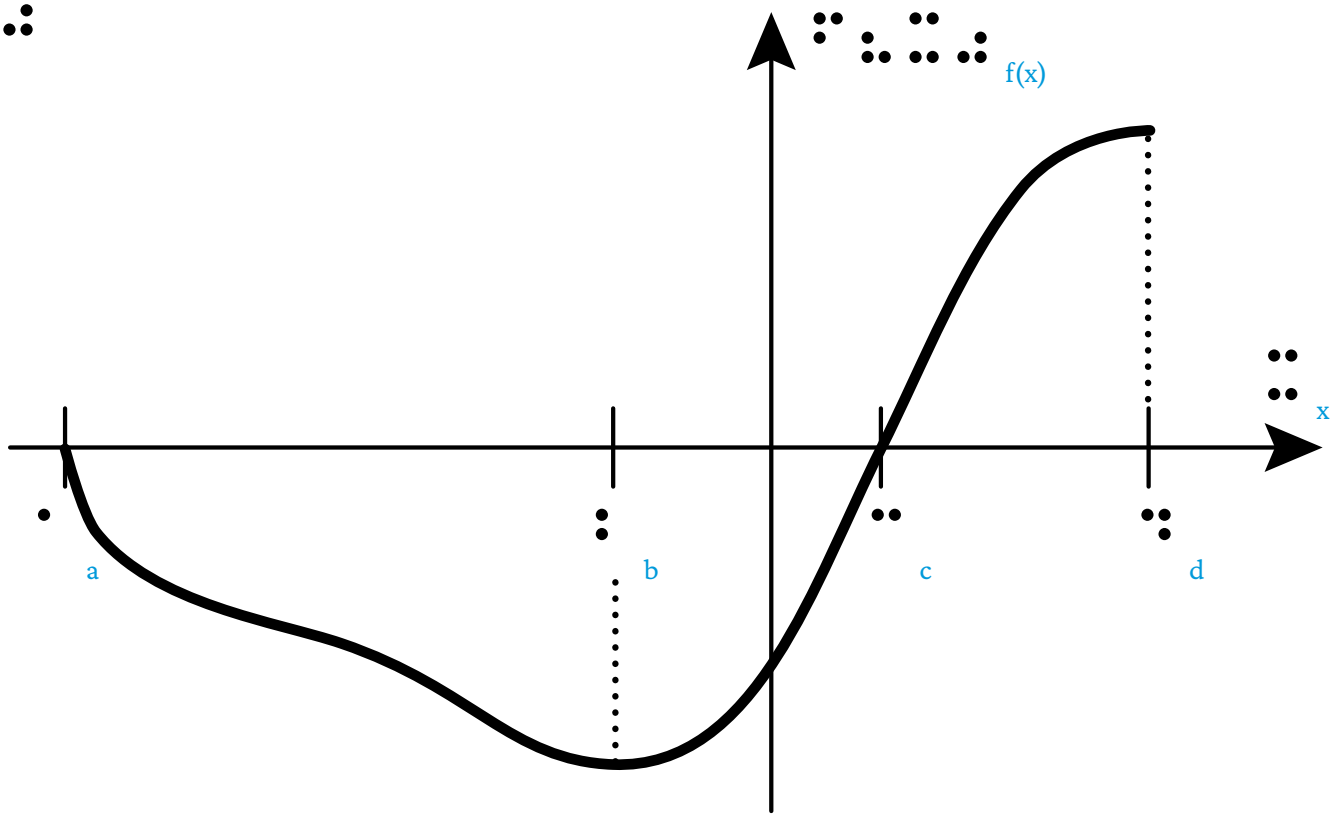

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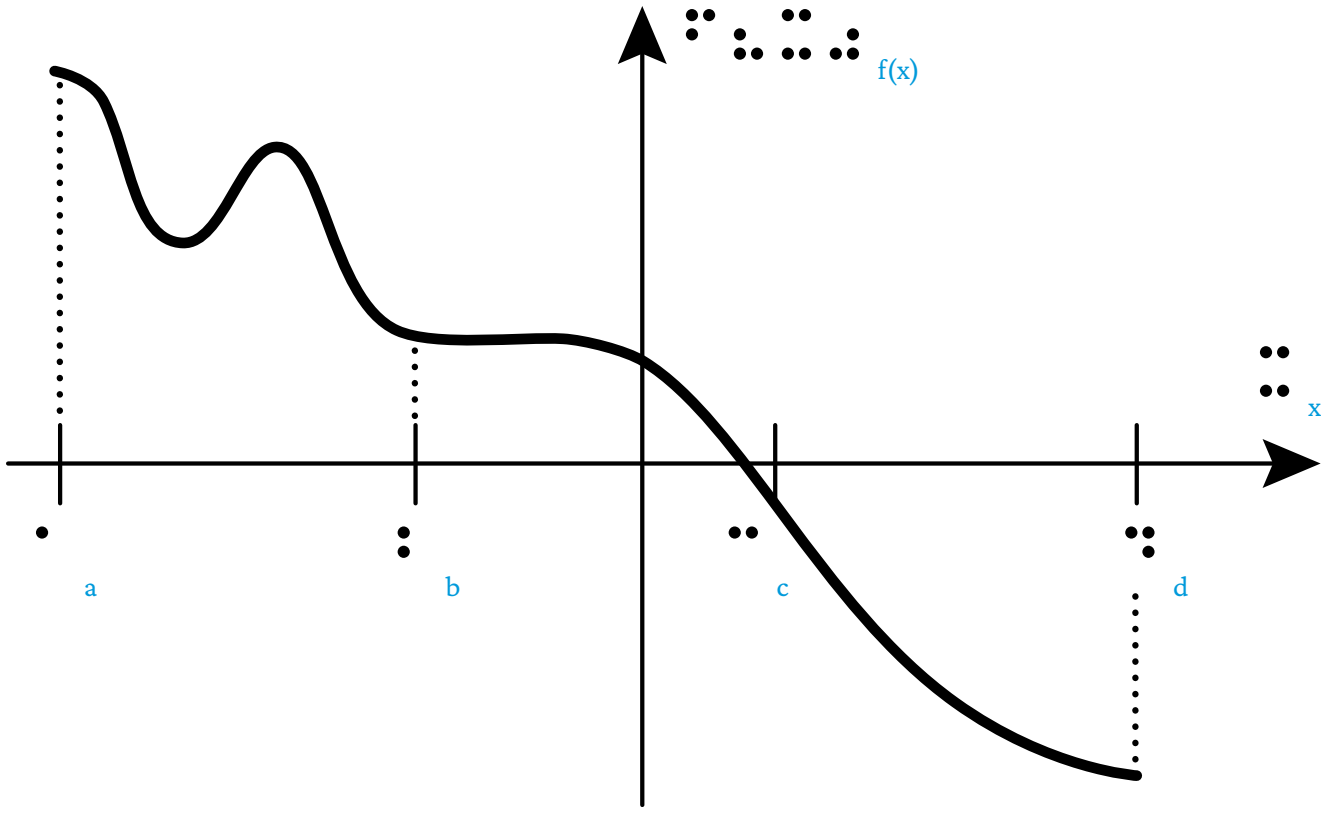
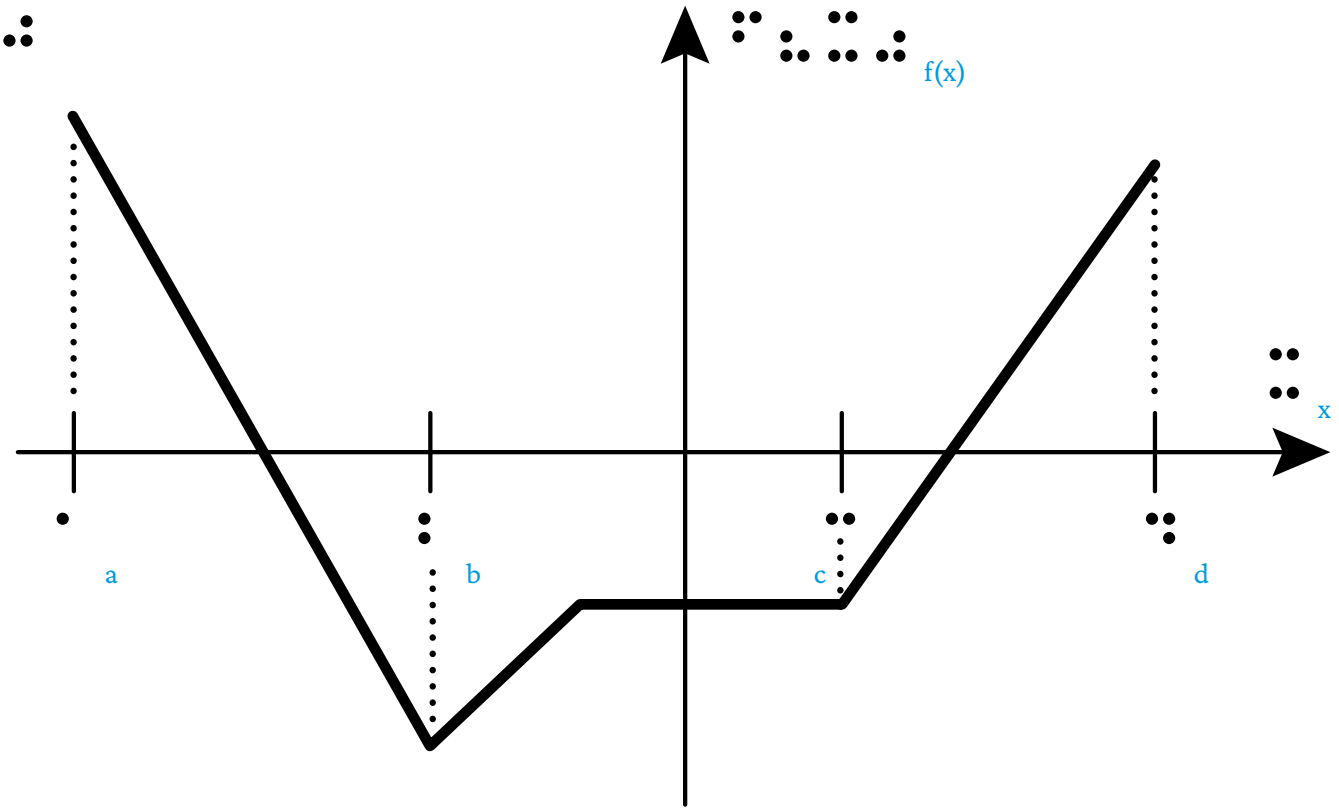


a)



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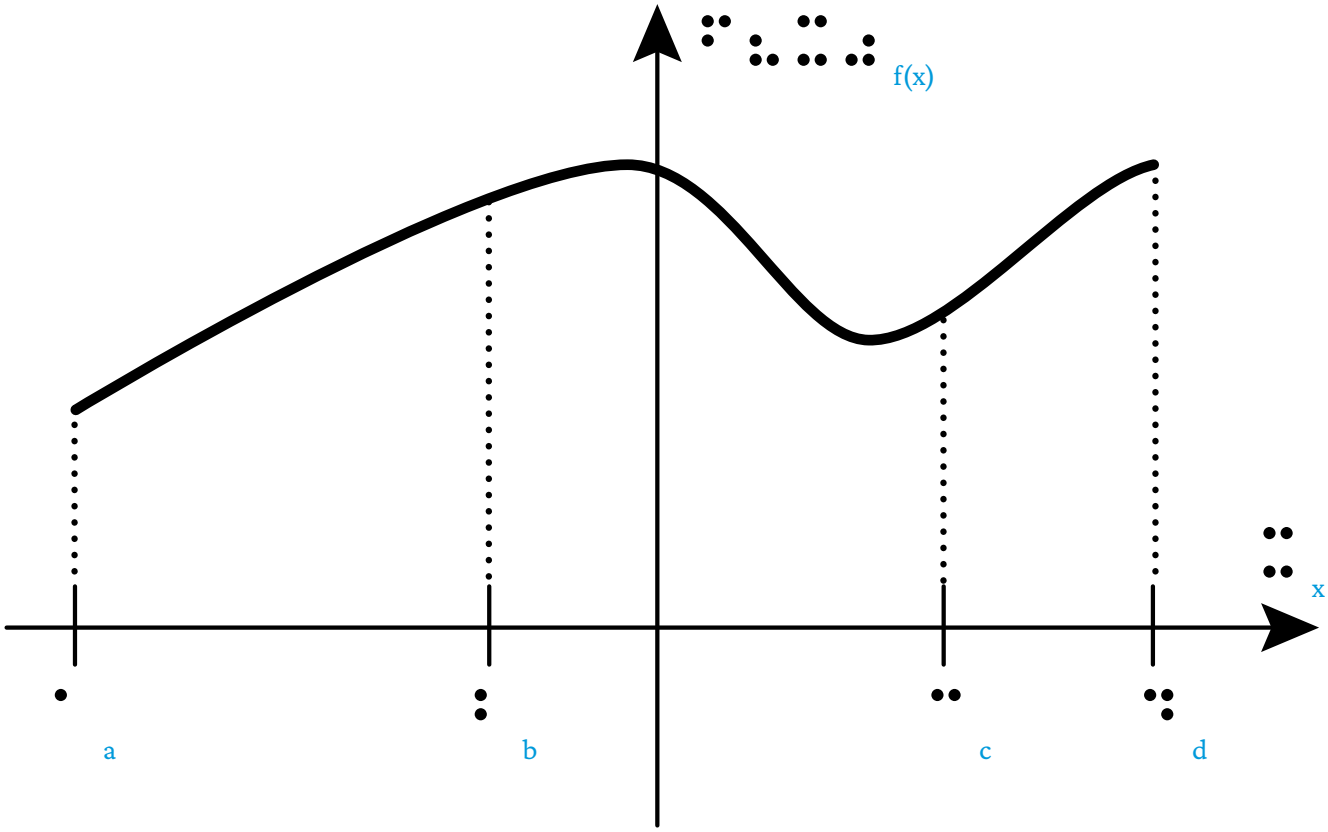

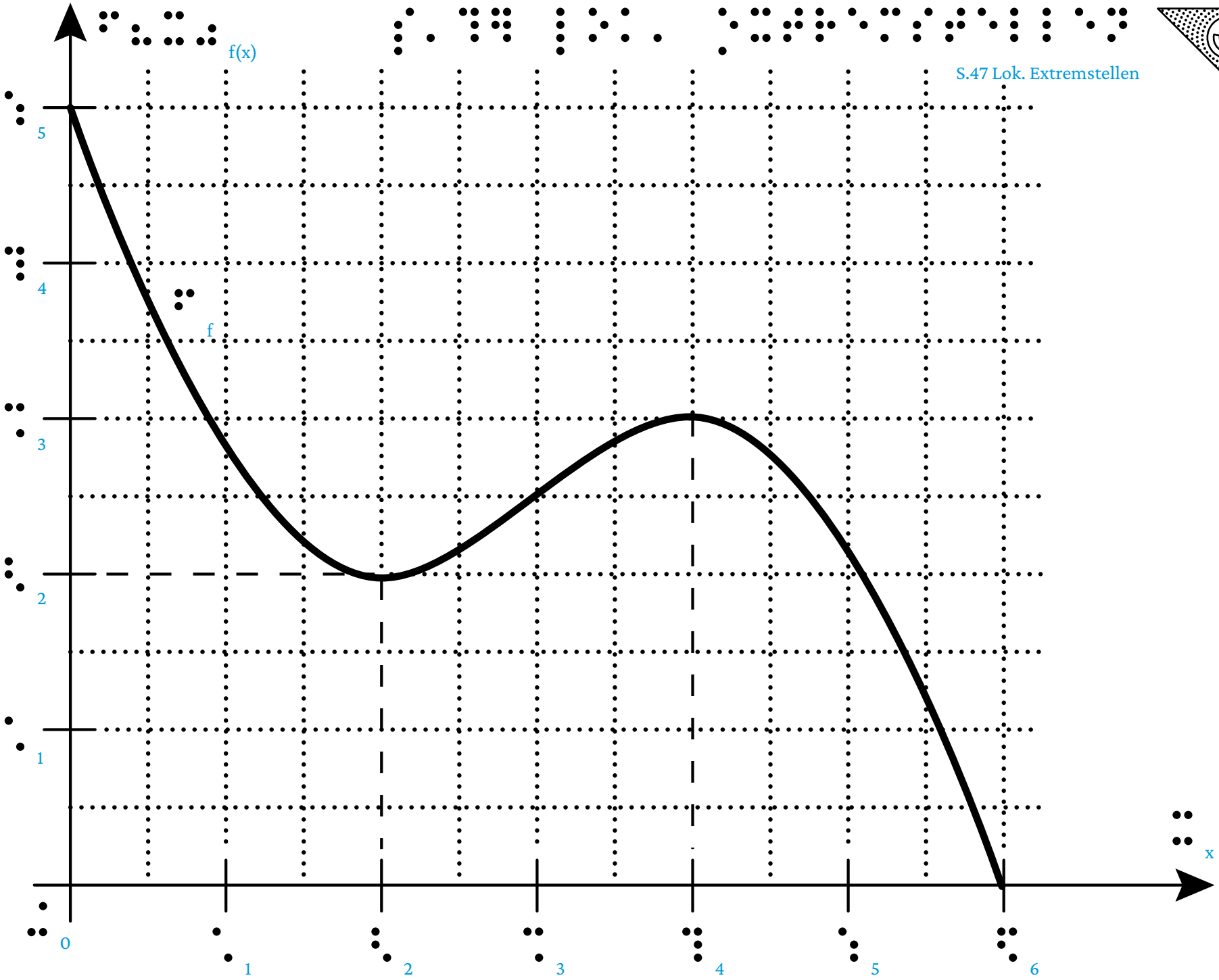
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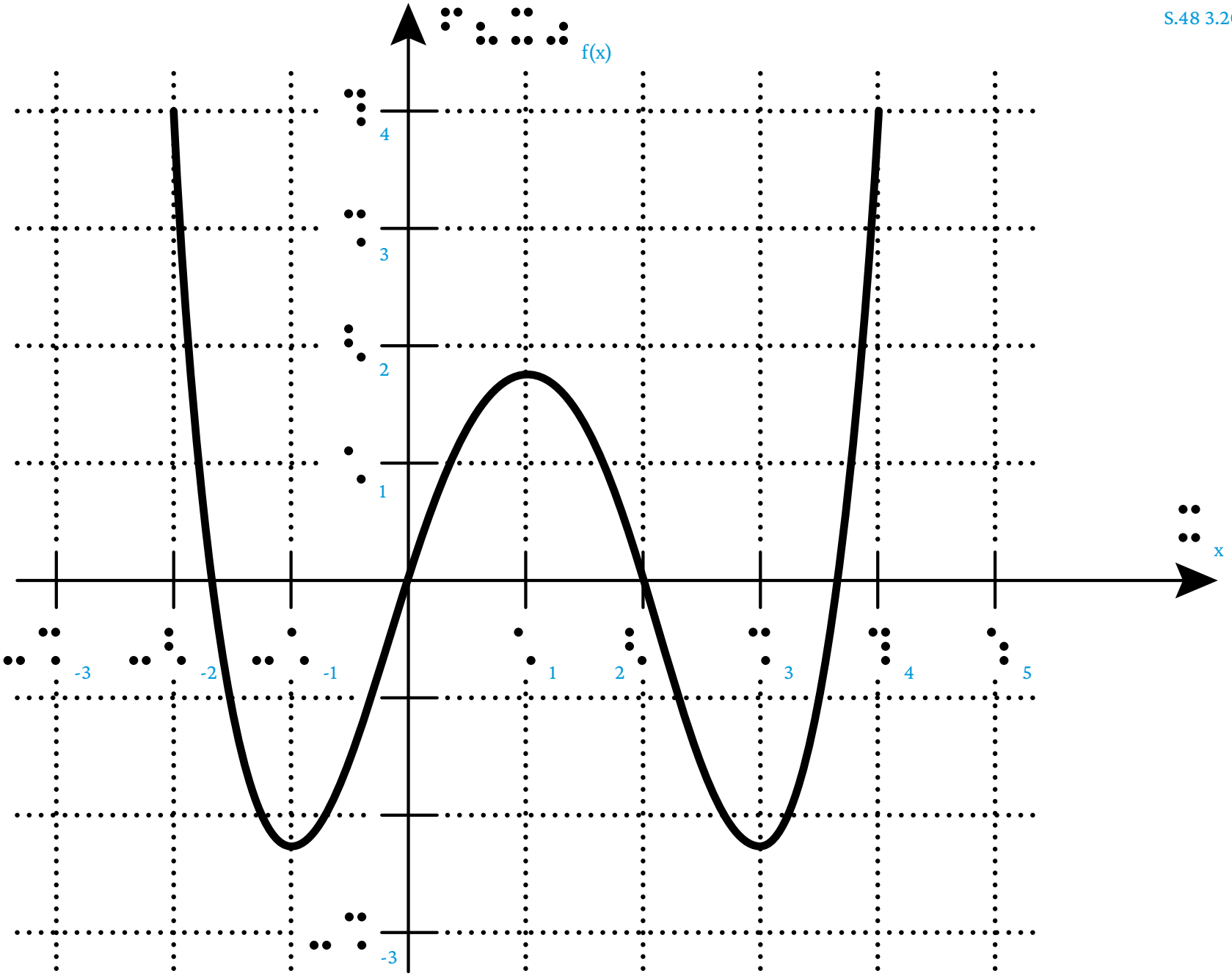
4
f
3
2
1
0
1
2
3
4
5
6
x


f(x)
x
4
3
2
1
-3
-2
-1
1
2
3
4
5
-3

Mv6

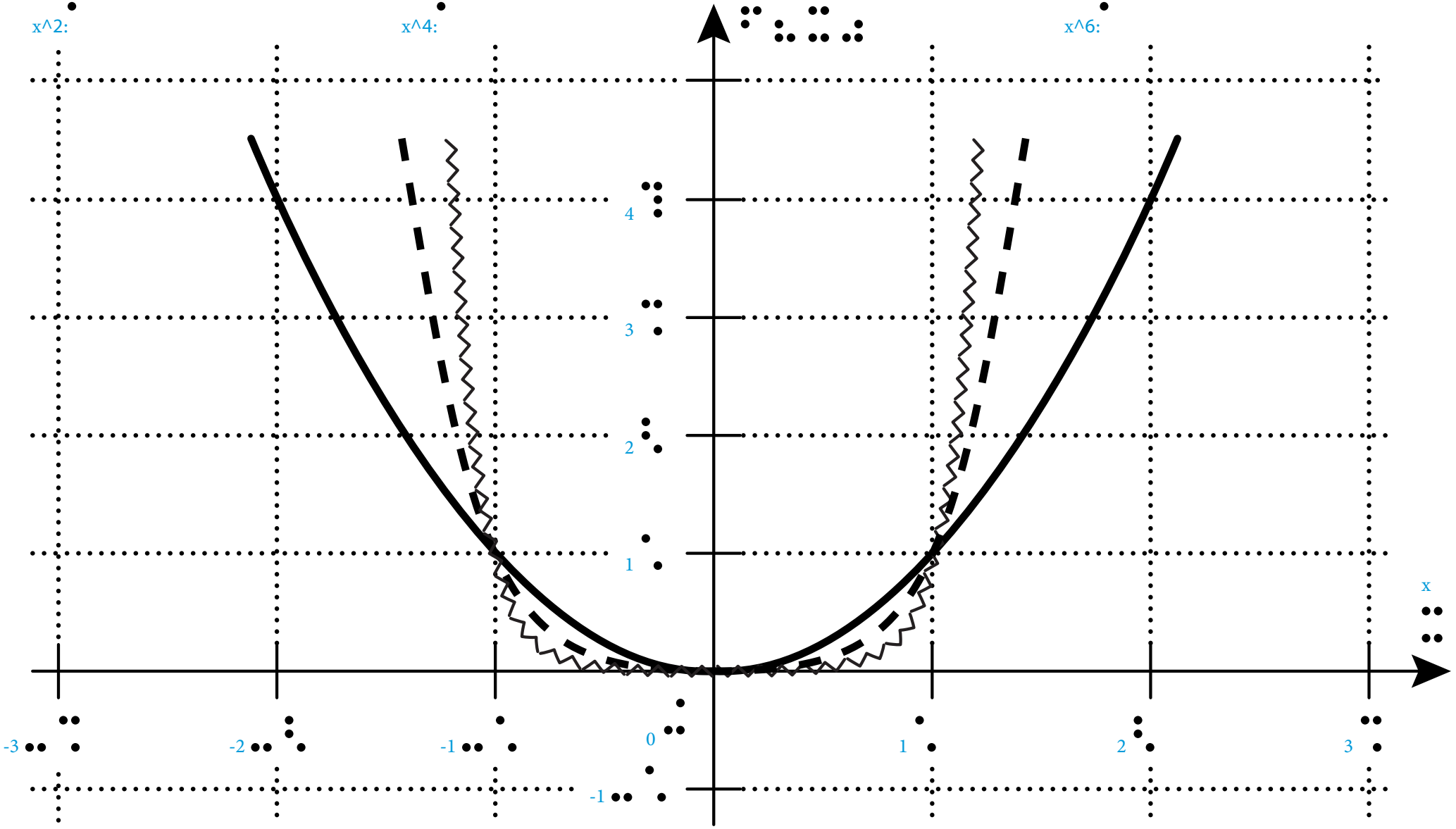
S.49 Potenzfunktion Exponent n 'el 'N

f(x) =x^n, n gerade

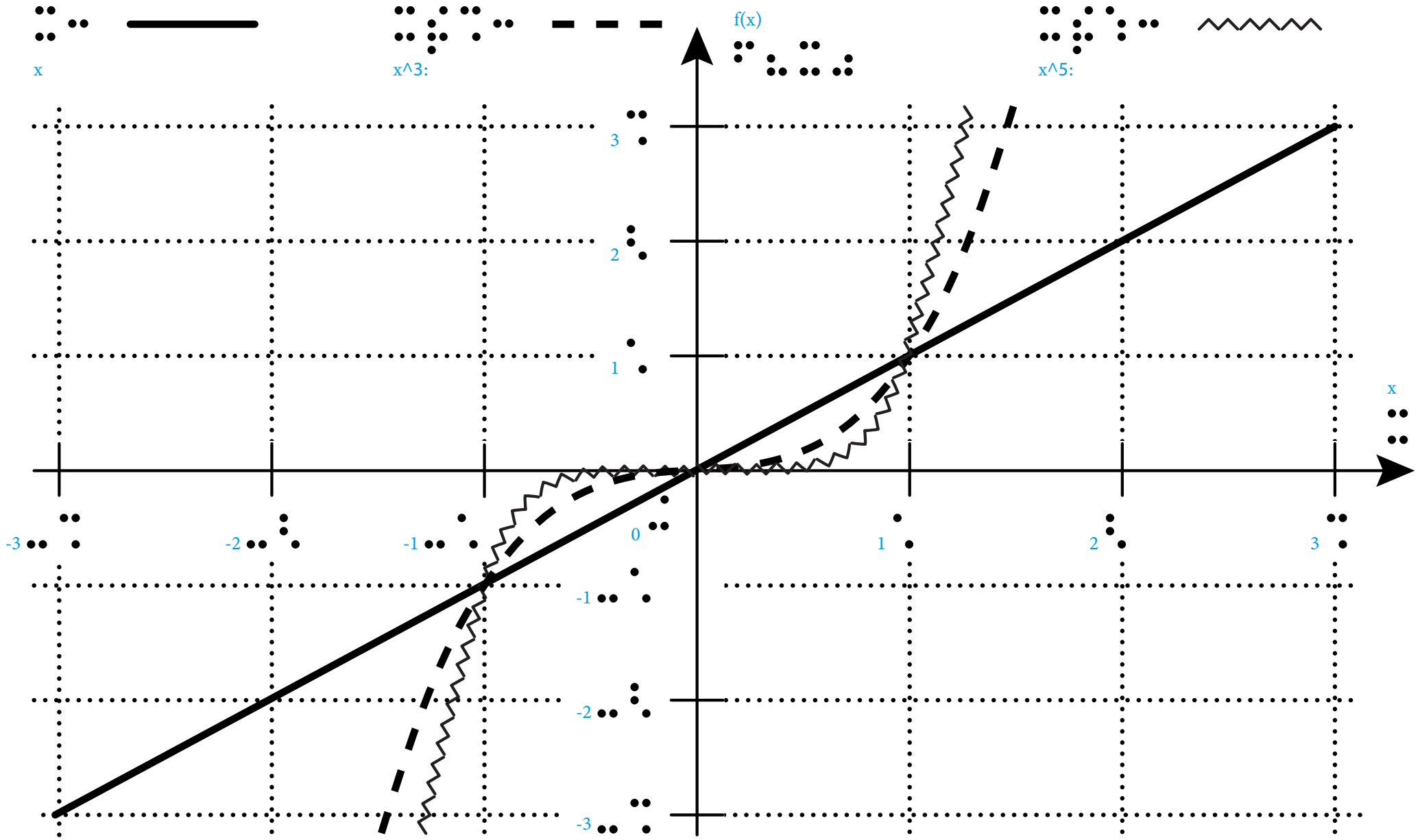
x^2:

x^4:

x^6:



f(x) =x^n, n ungerade

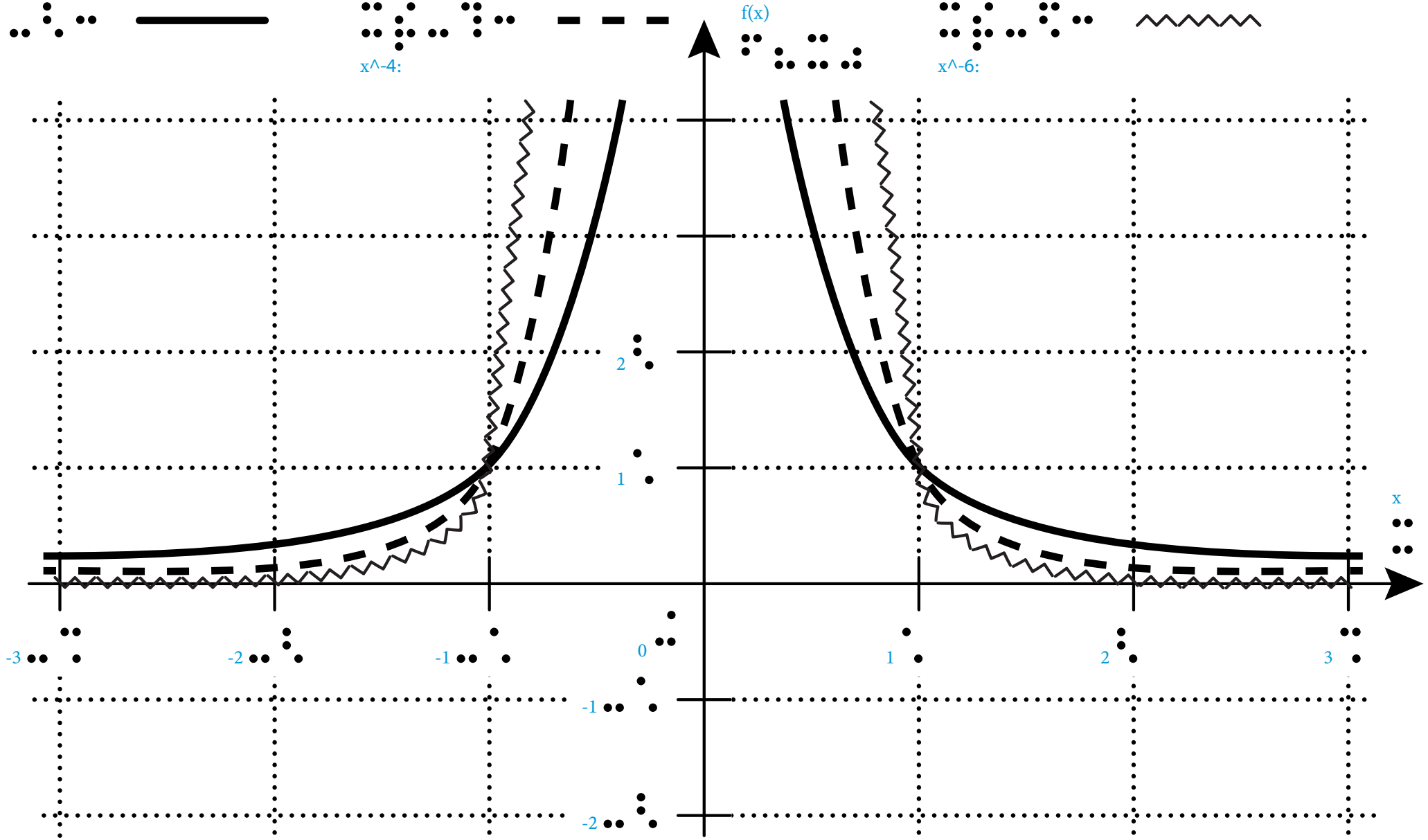


f(x) =x^-n, n gerade

x^-2:

x^-4:

x^-6:



Mv6

S.49 Potenzfunktion Exponent n 'el 'Z^-

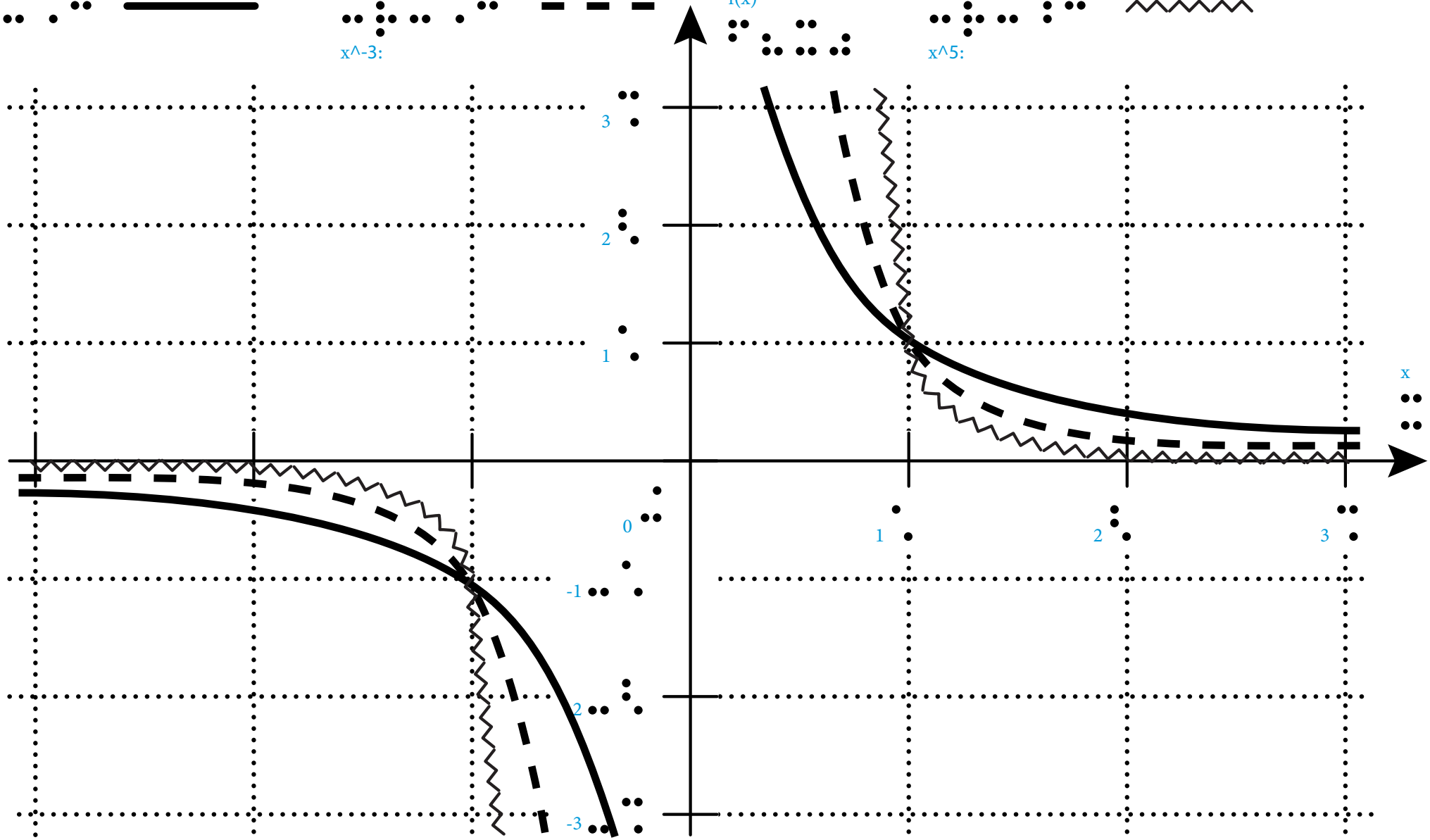
f(x) =x^-n, n ungerade

x^-1:

x^-3:

f(x)

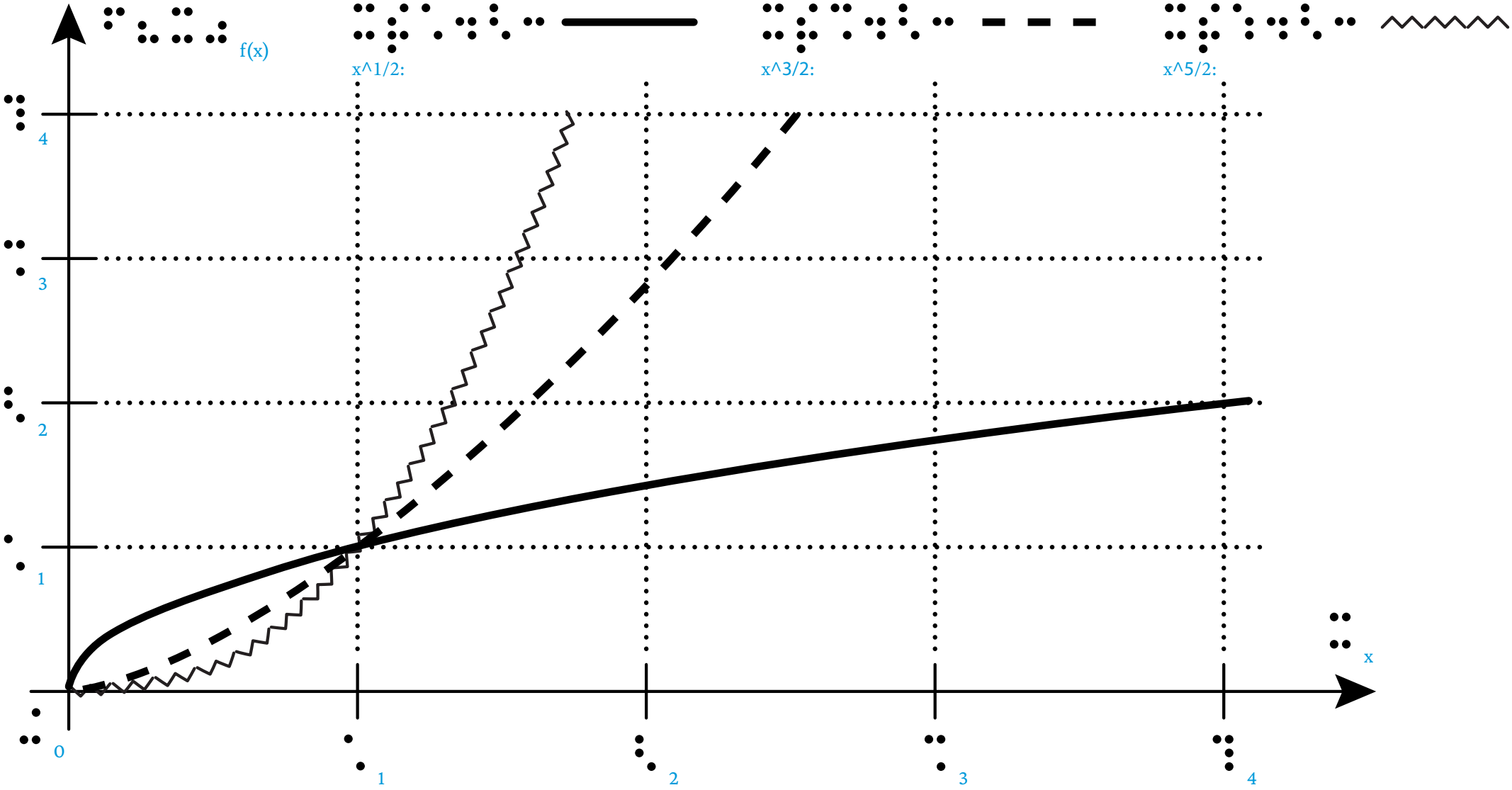
x^5:



Mv6

S.50 Potenzfunktionen mit Exponenten m/n 'el 'Q \'el 'Z

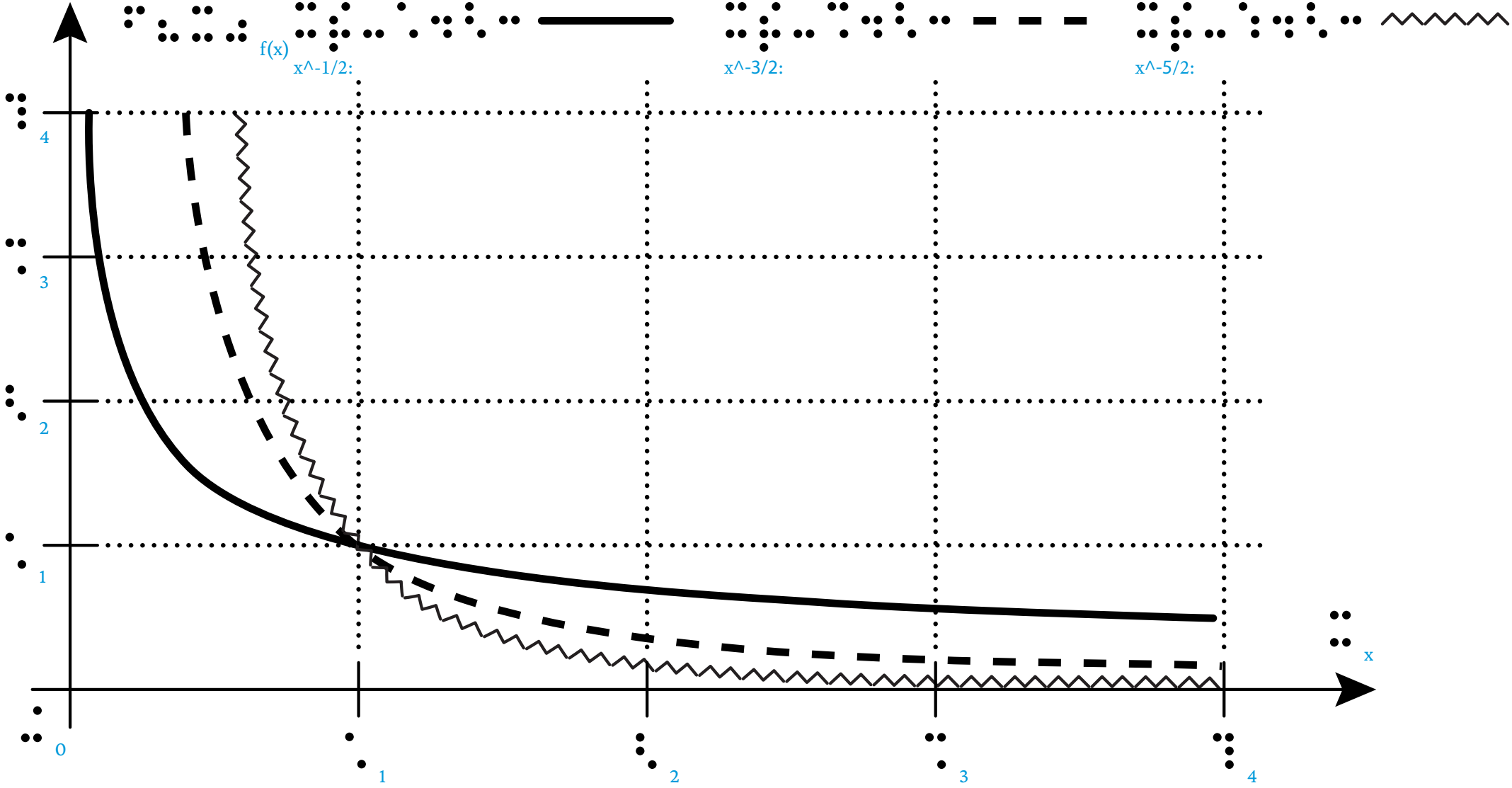
f(x) =x^m/n, m/n >0



Mv6

S.50 Potenzfunktionen mit Exponenten m/n 'el 'Q \'el 'Z

f(x) =x^m/n, m/n <0



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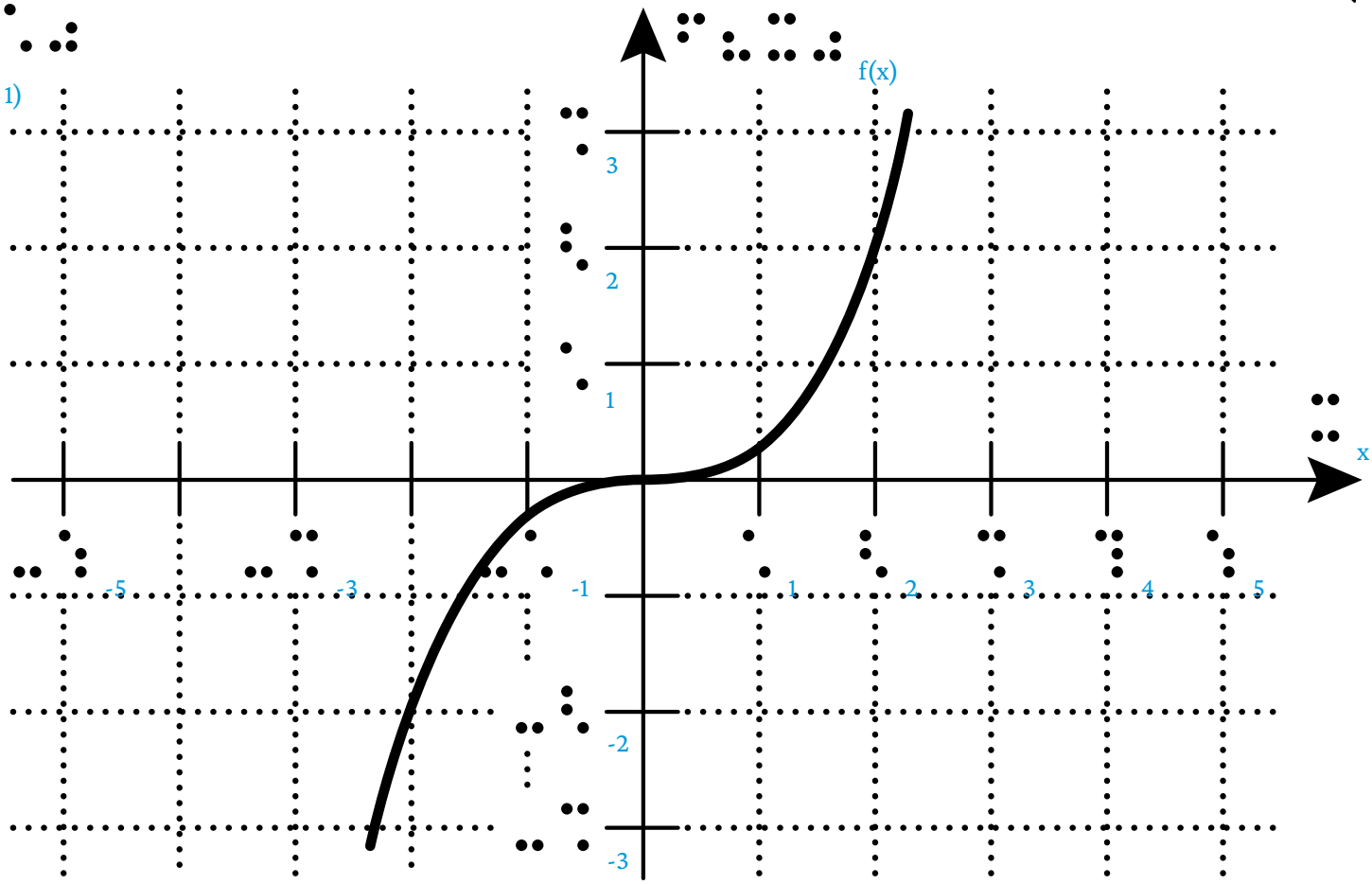

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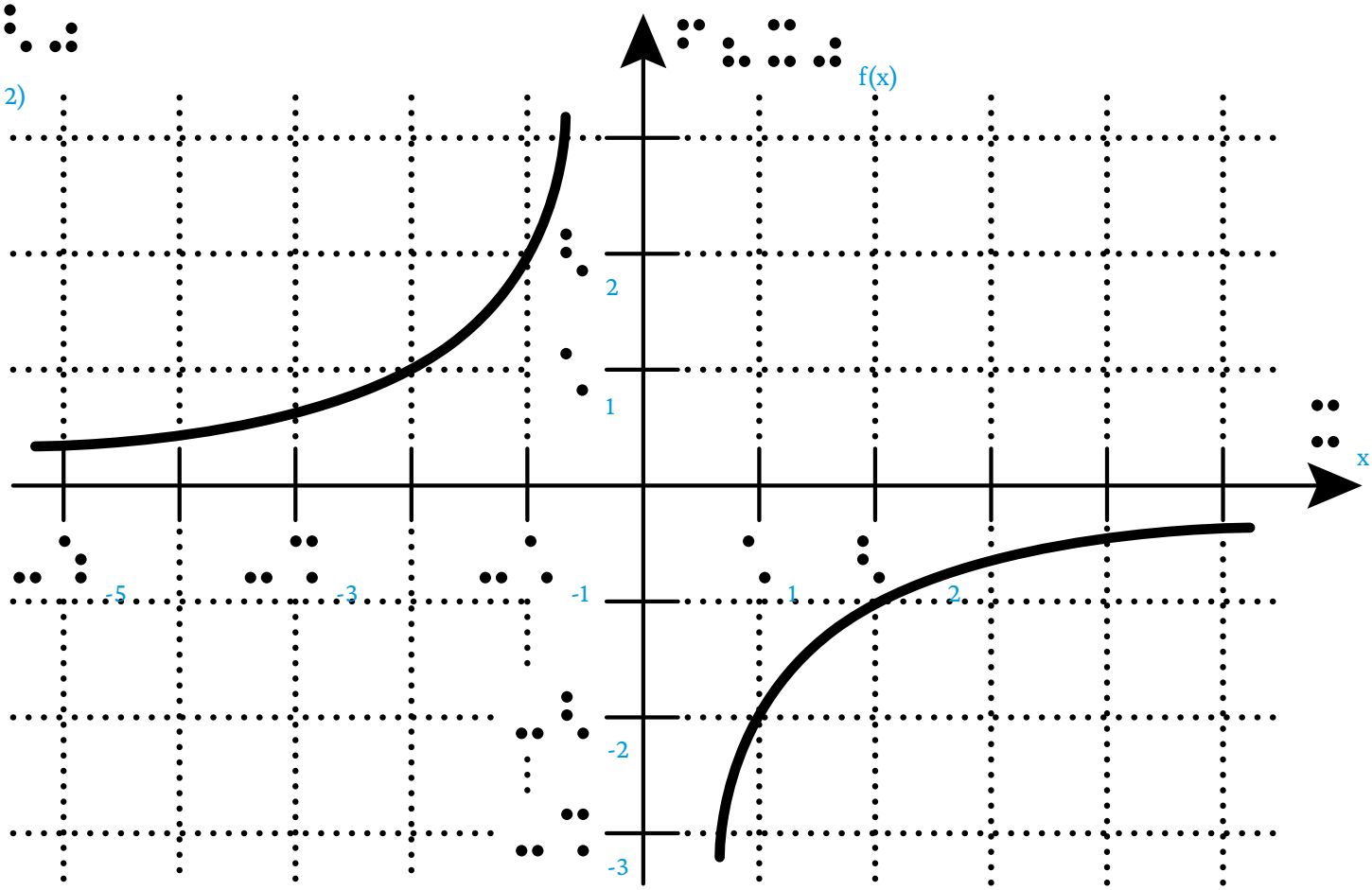
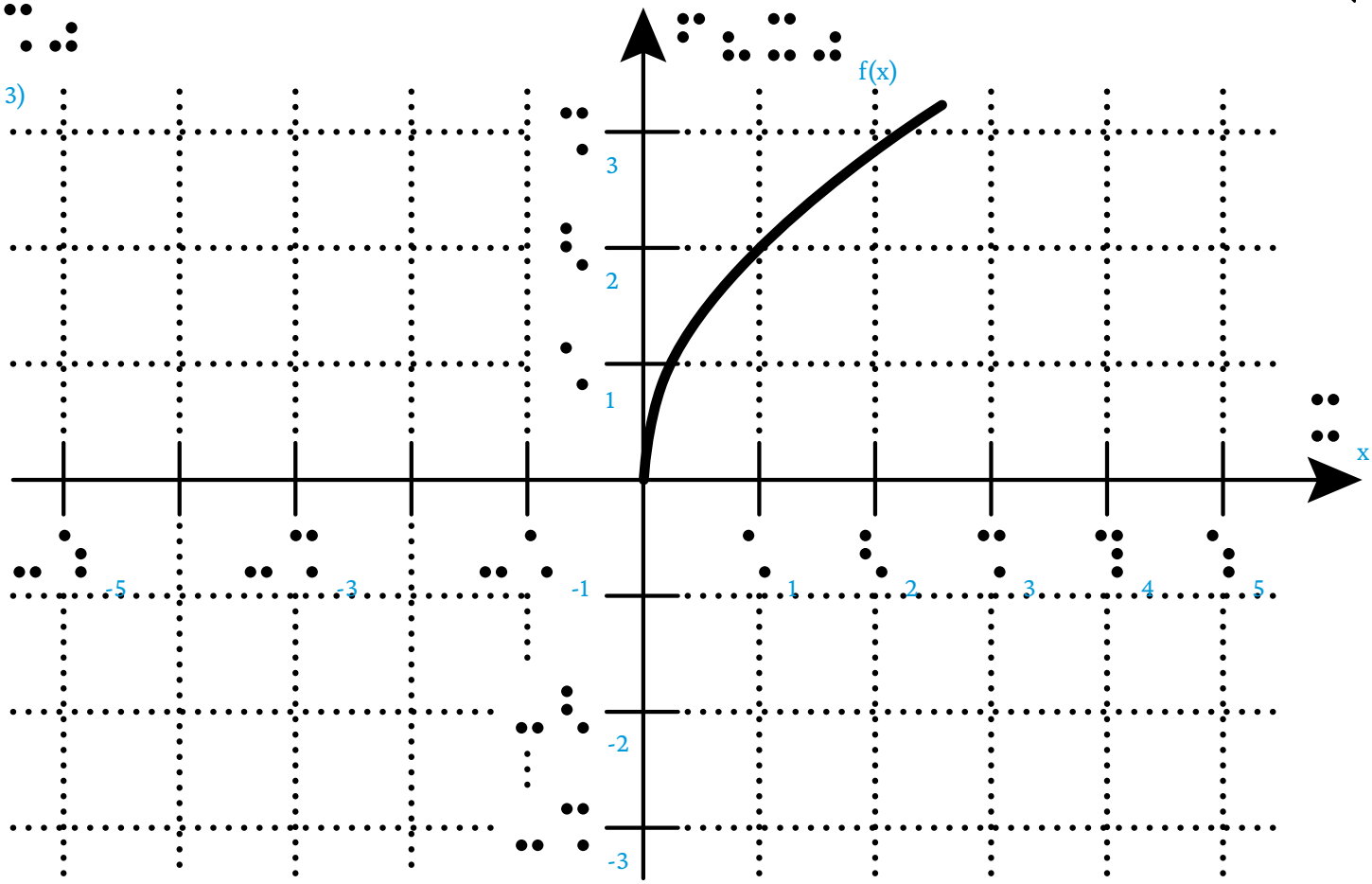


S.51 3.21 3, 4

3)



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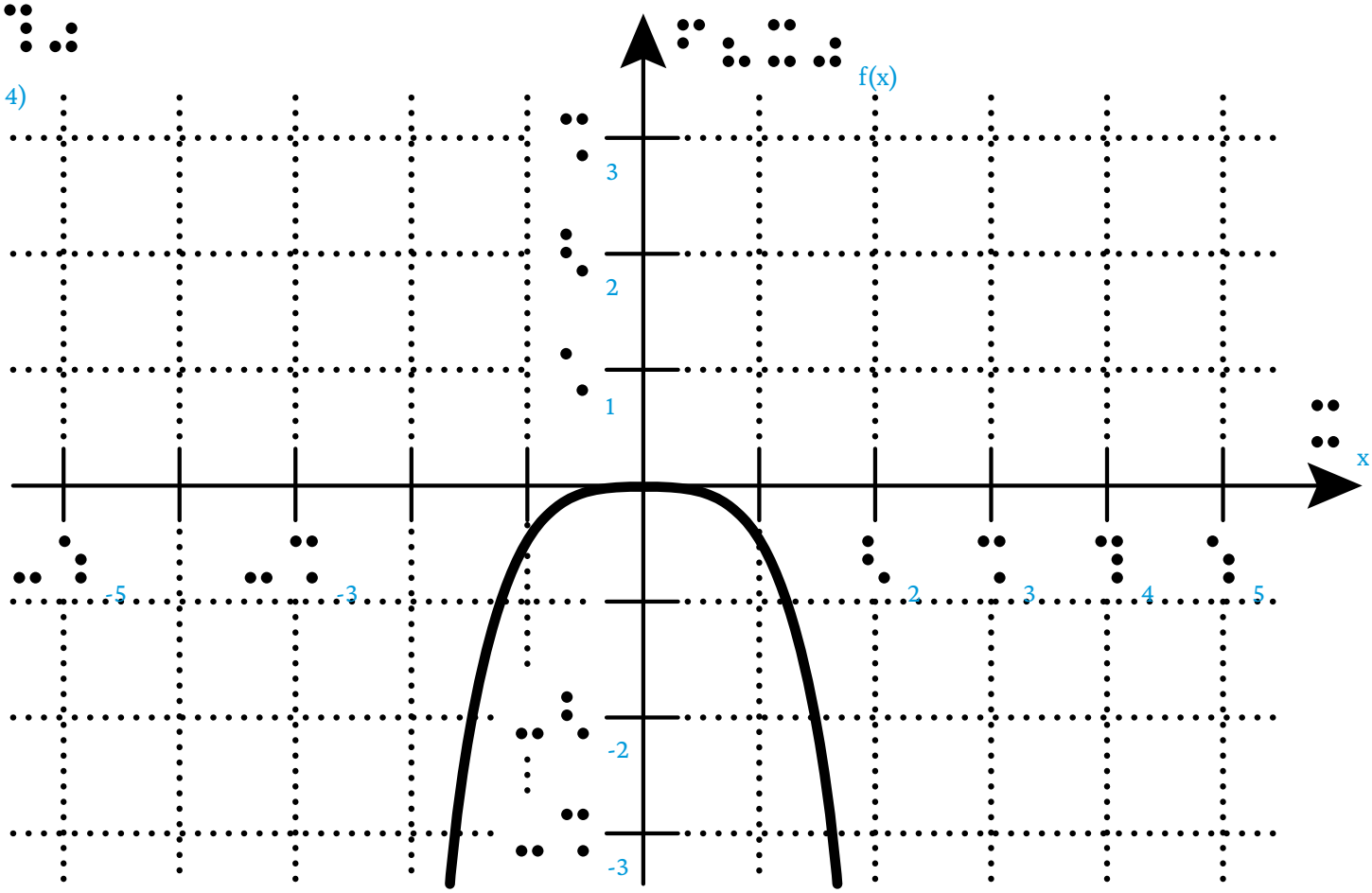
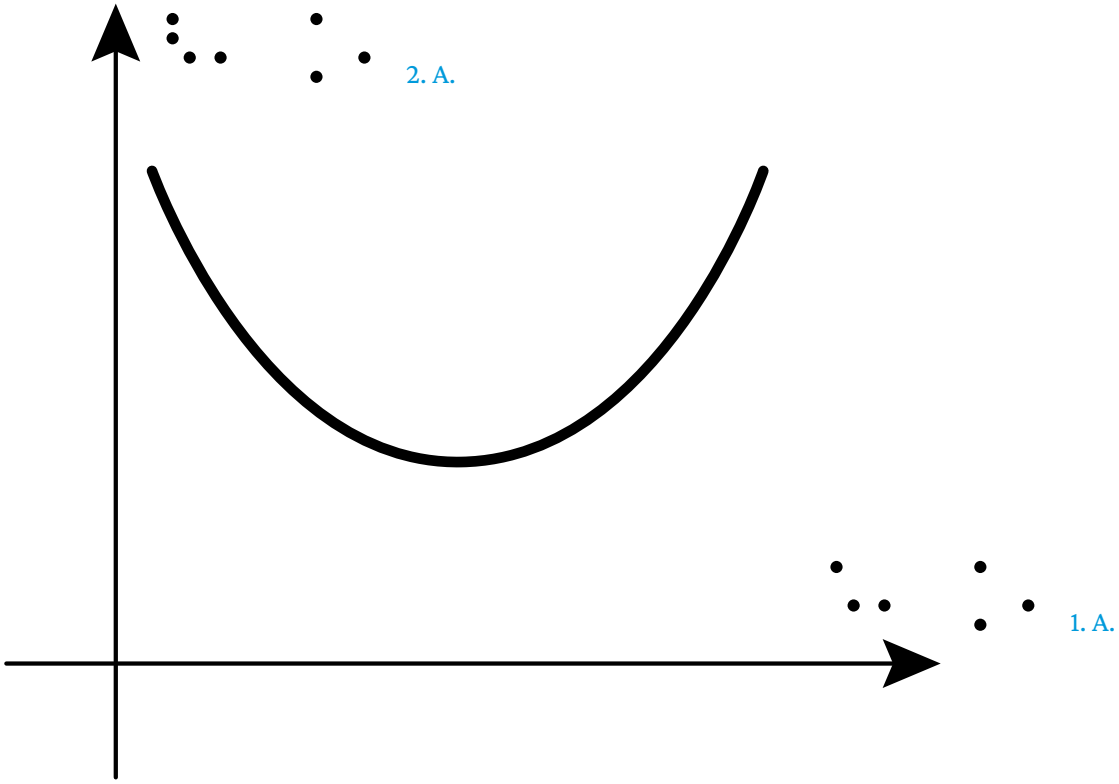
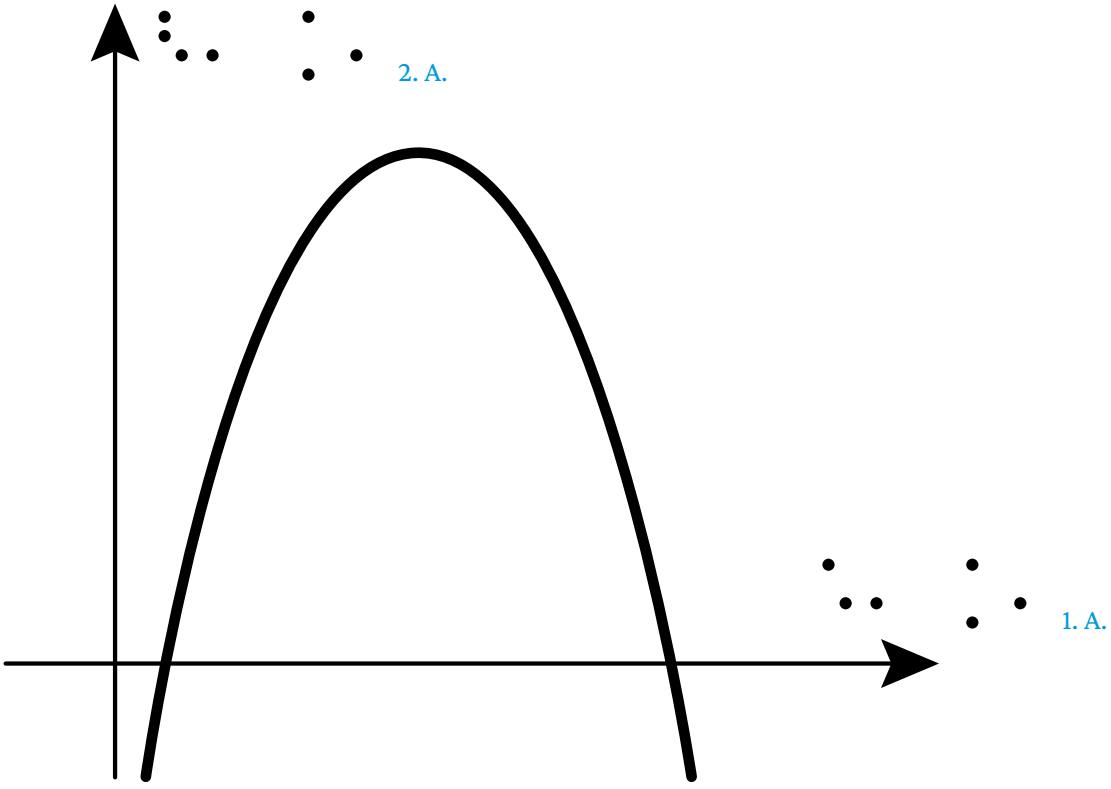


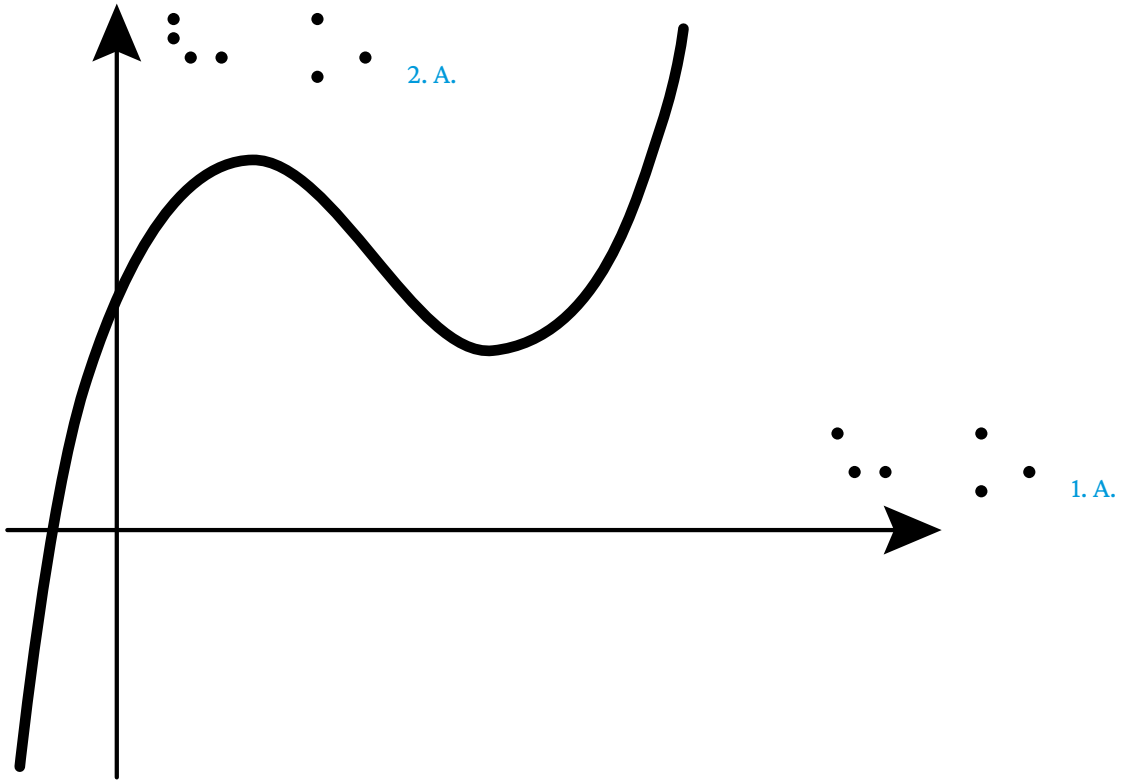
3.3 a



3.3 b



3.4 a



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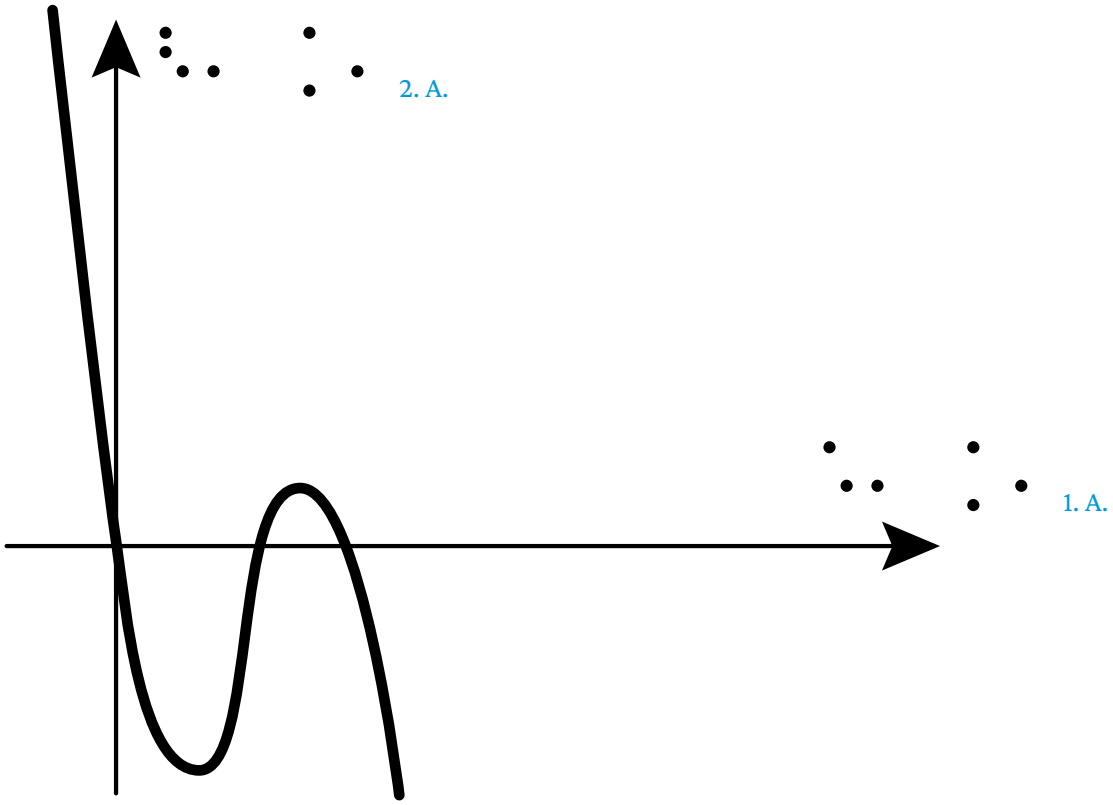
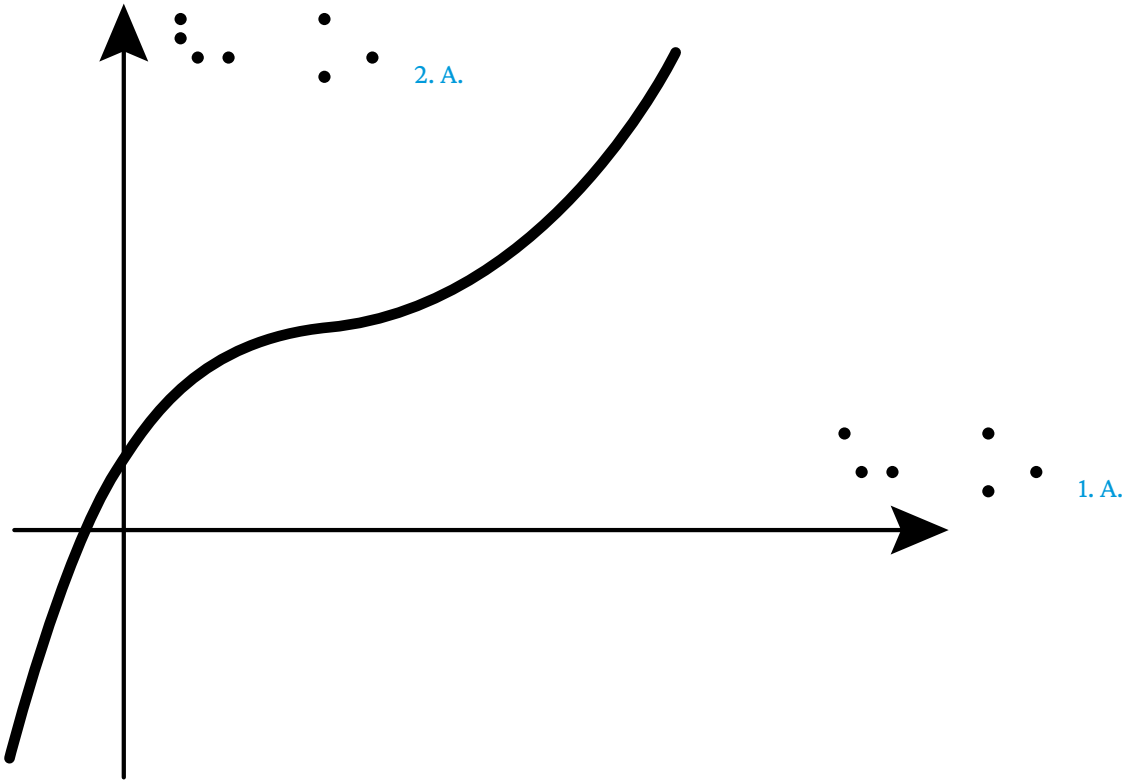


3.4 c



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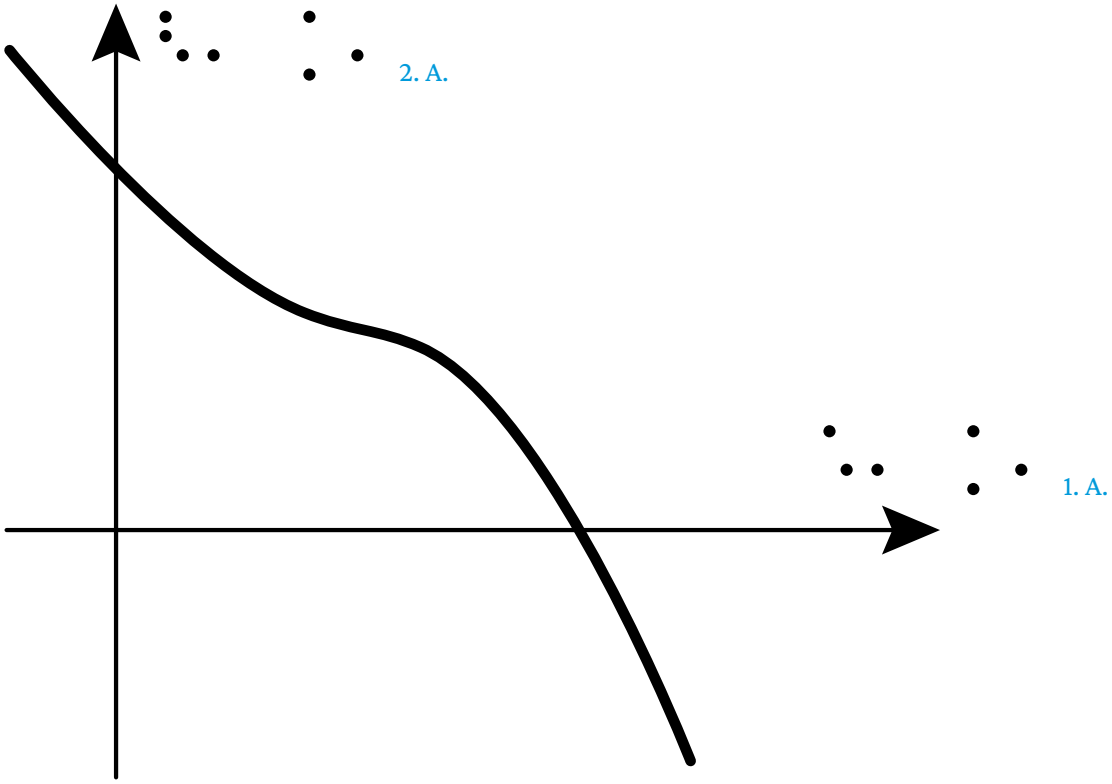
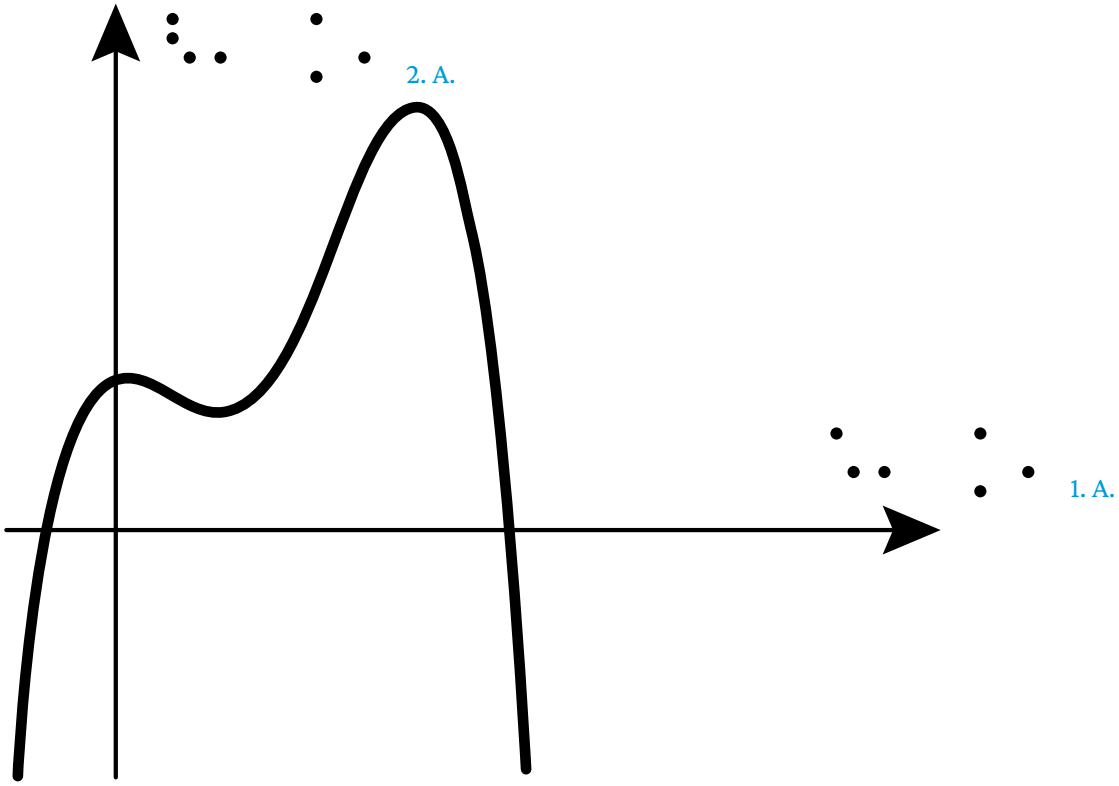


3.5 a



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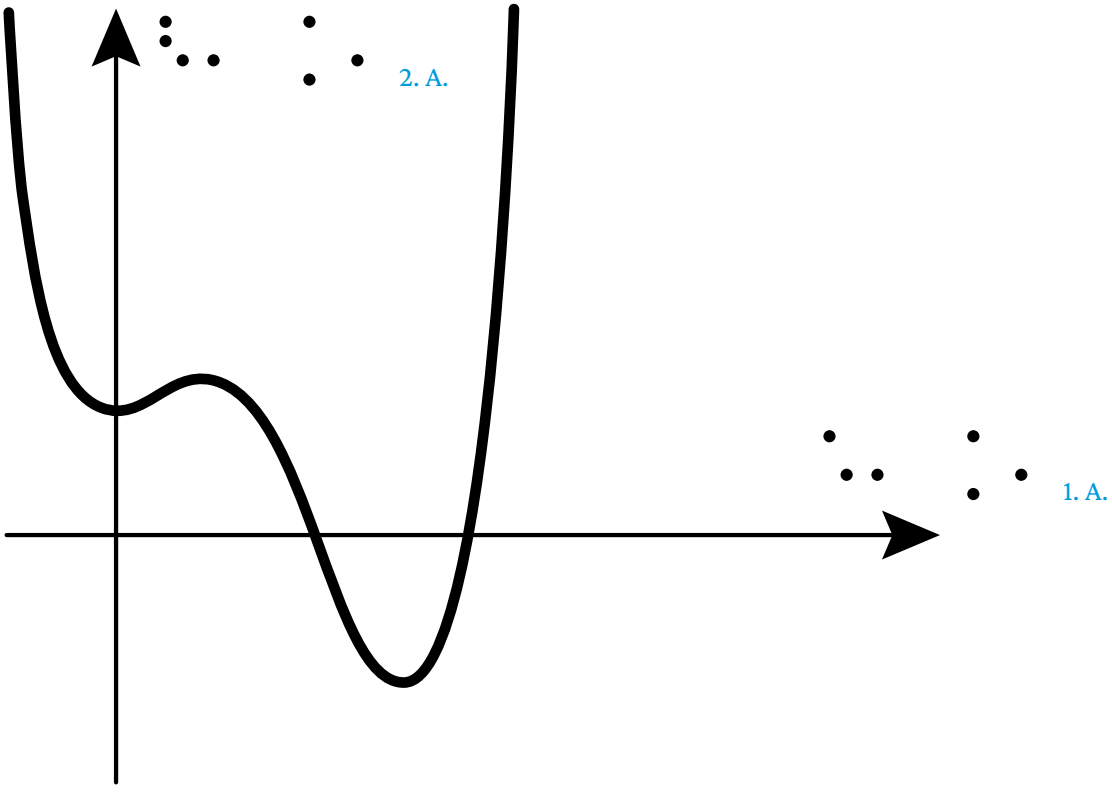

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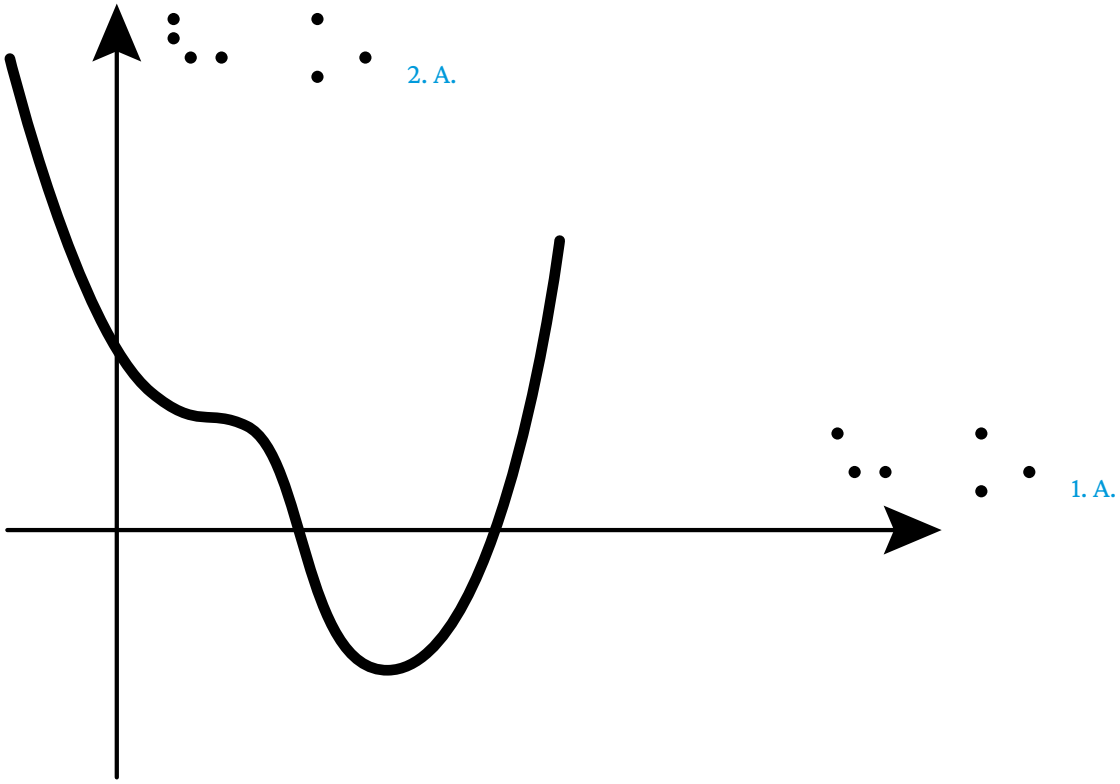

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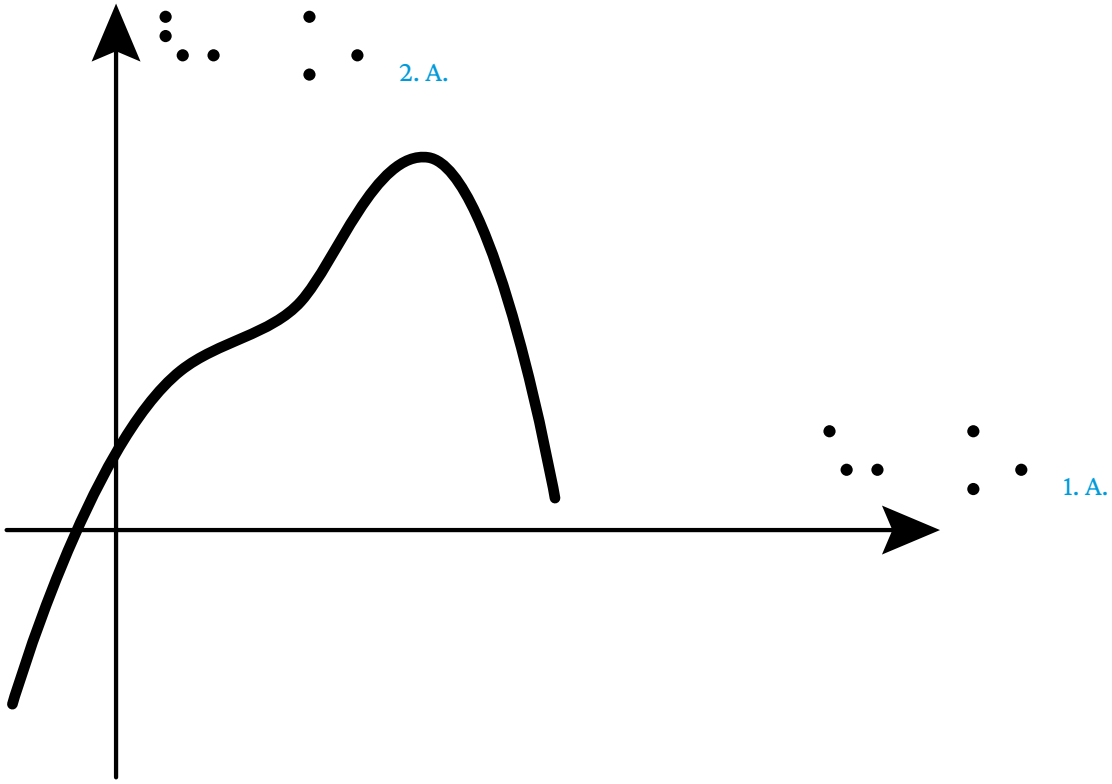

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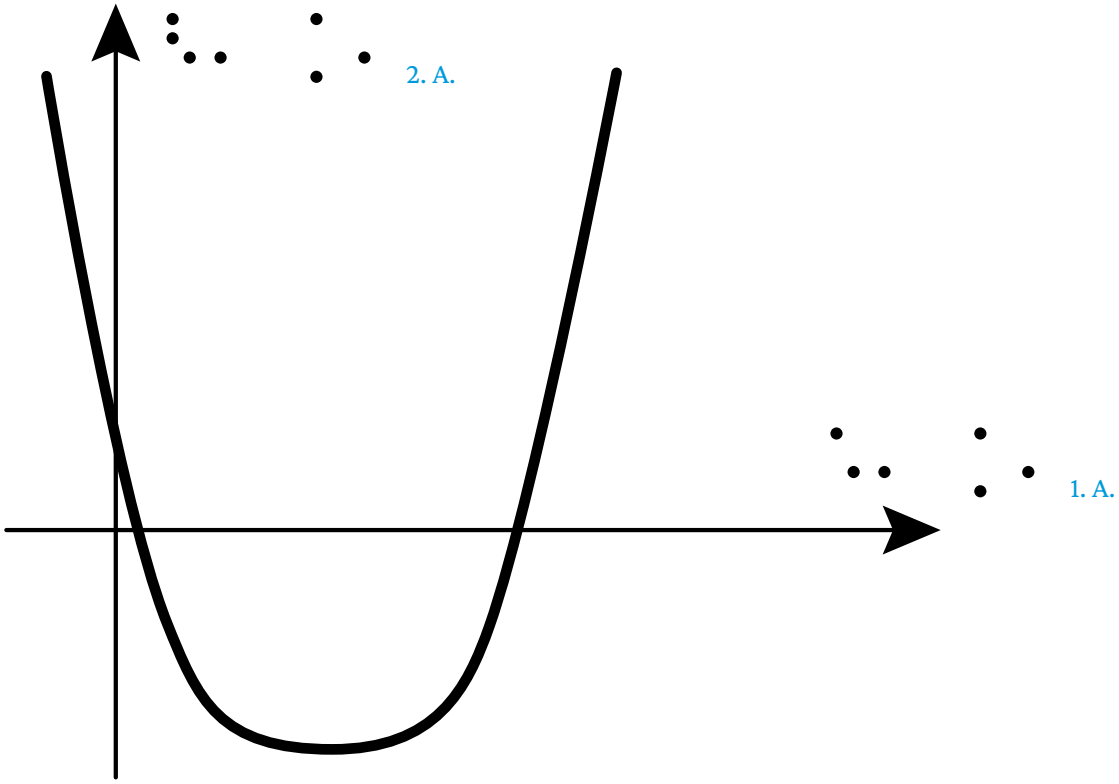
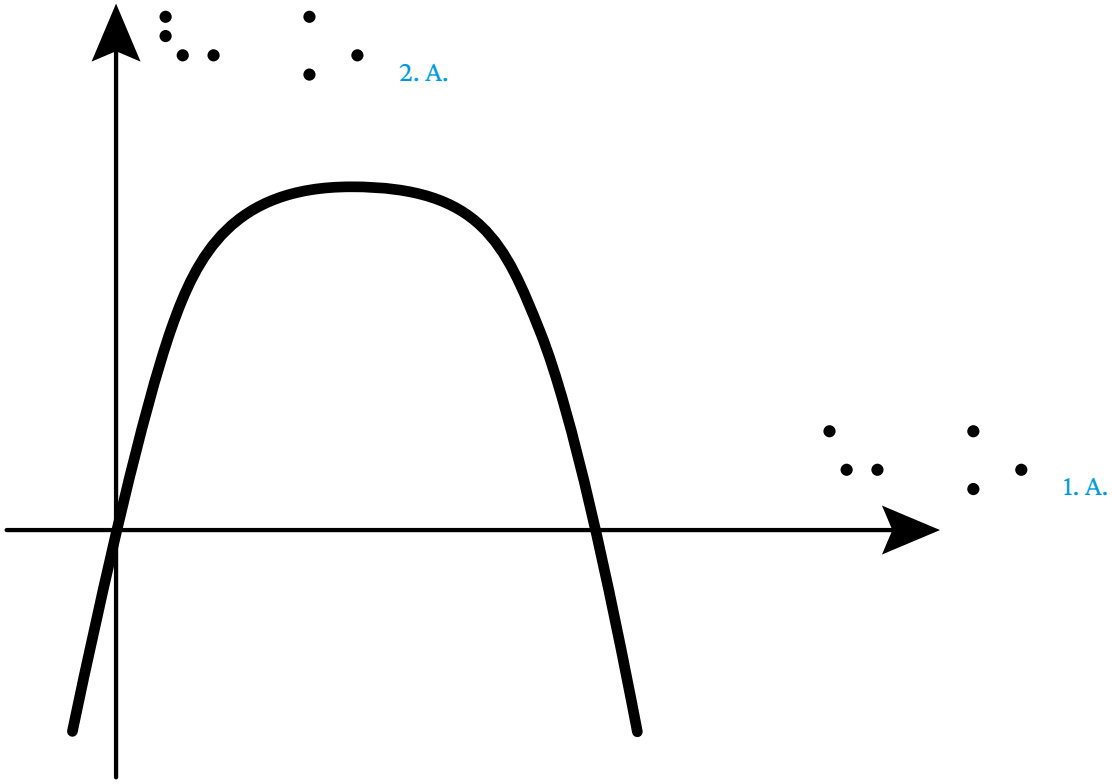


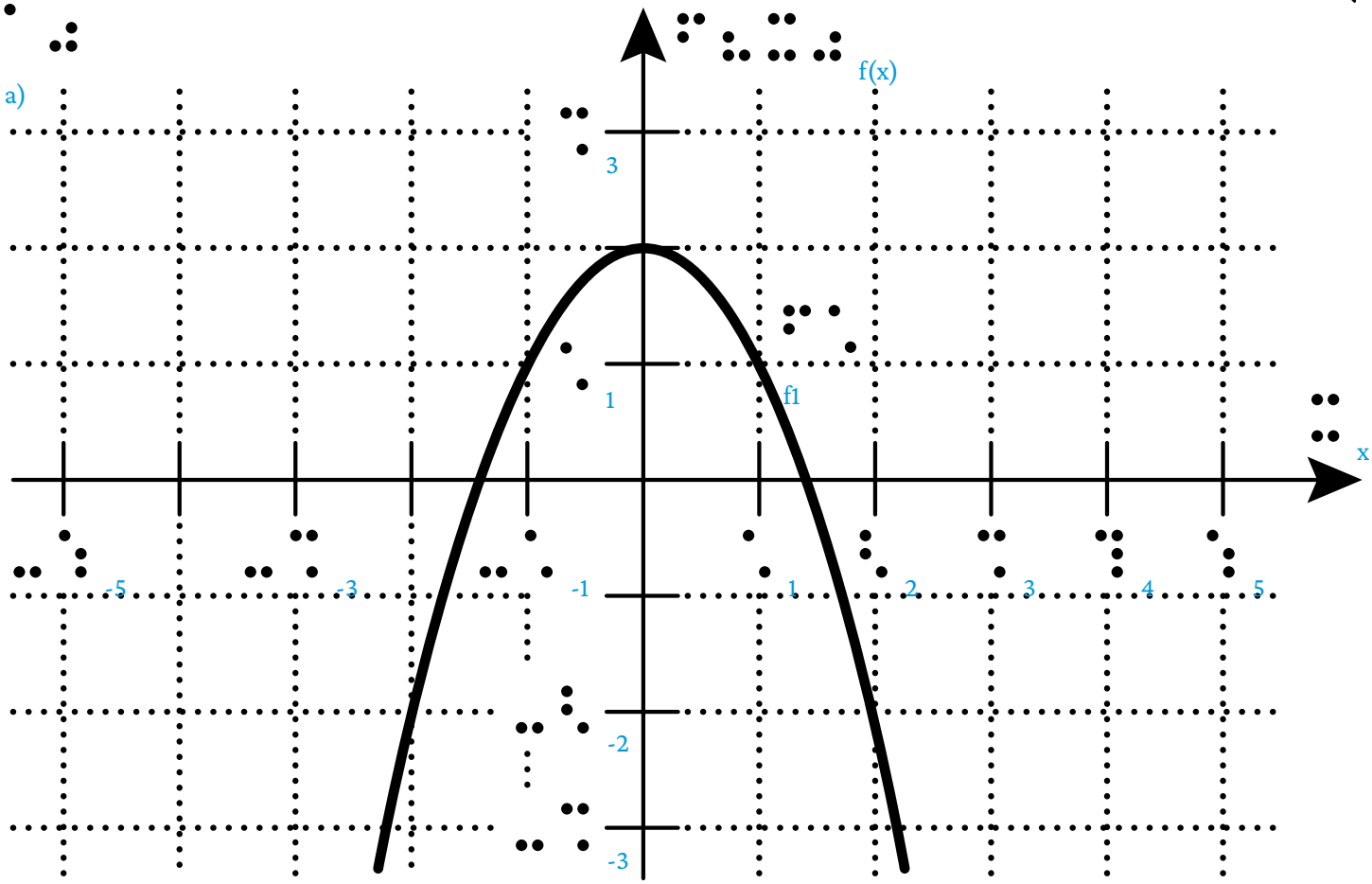
3.5 f



Mv6

S.53 3.25 a, b

a)



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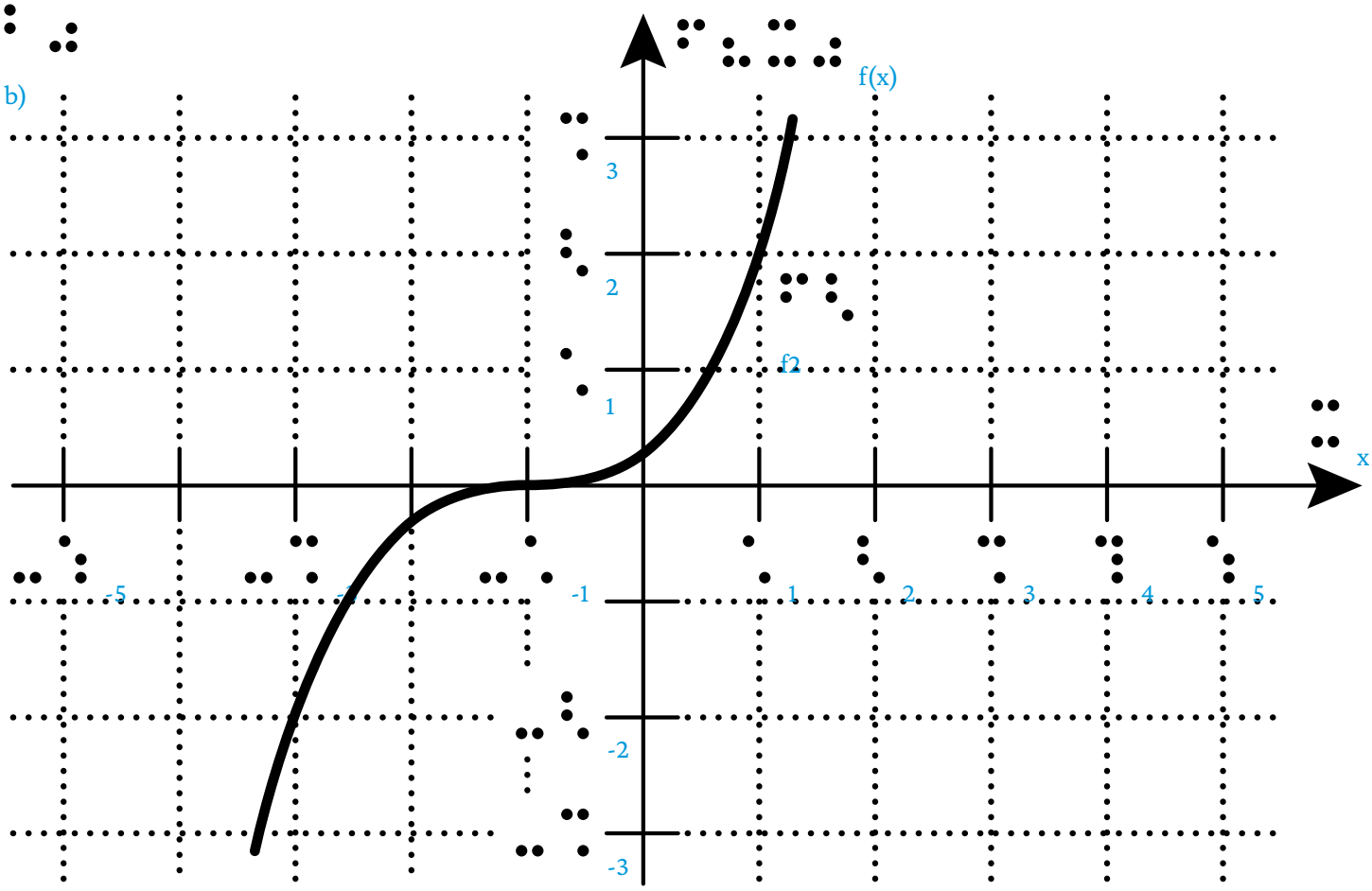
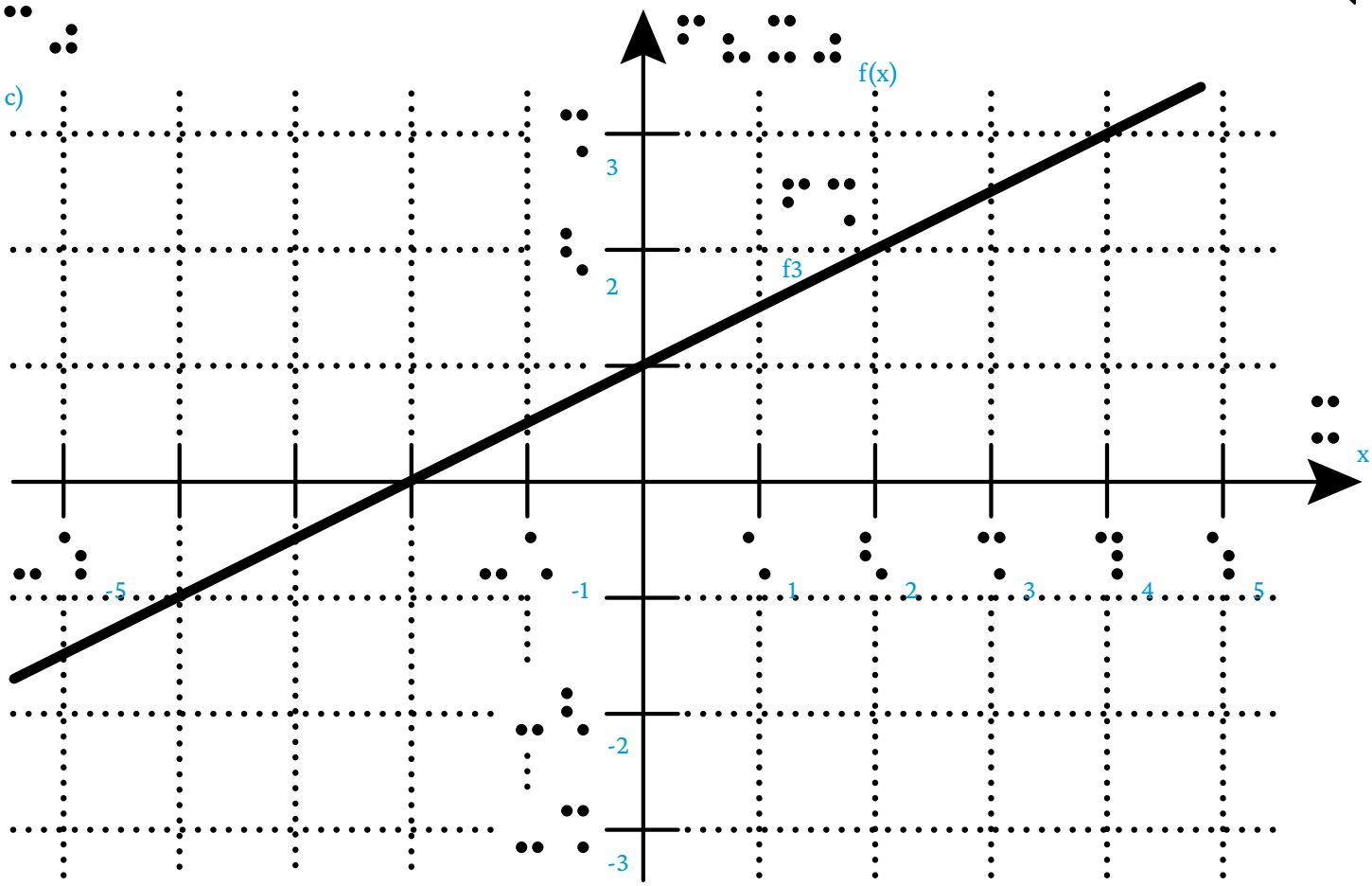
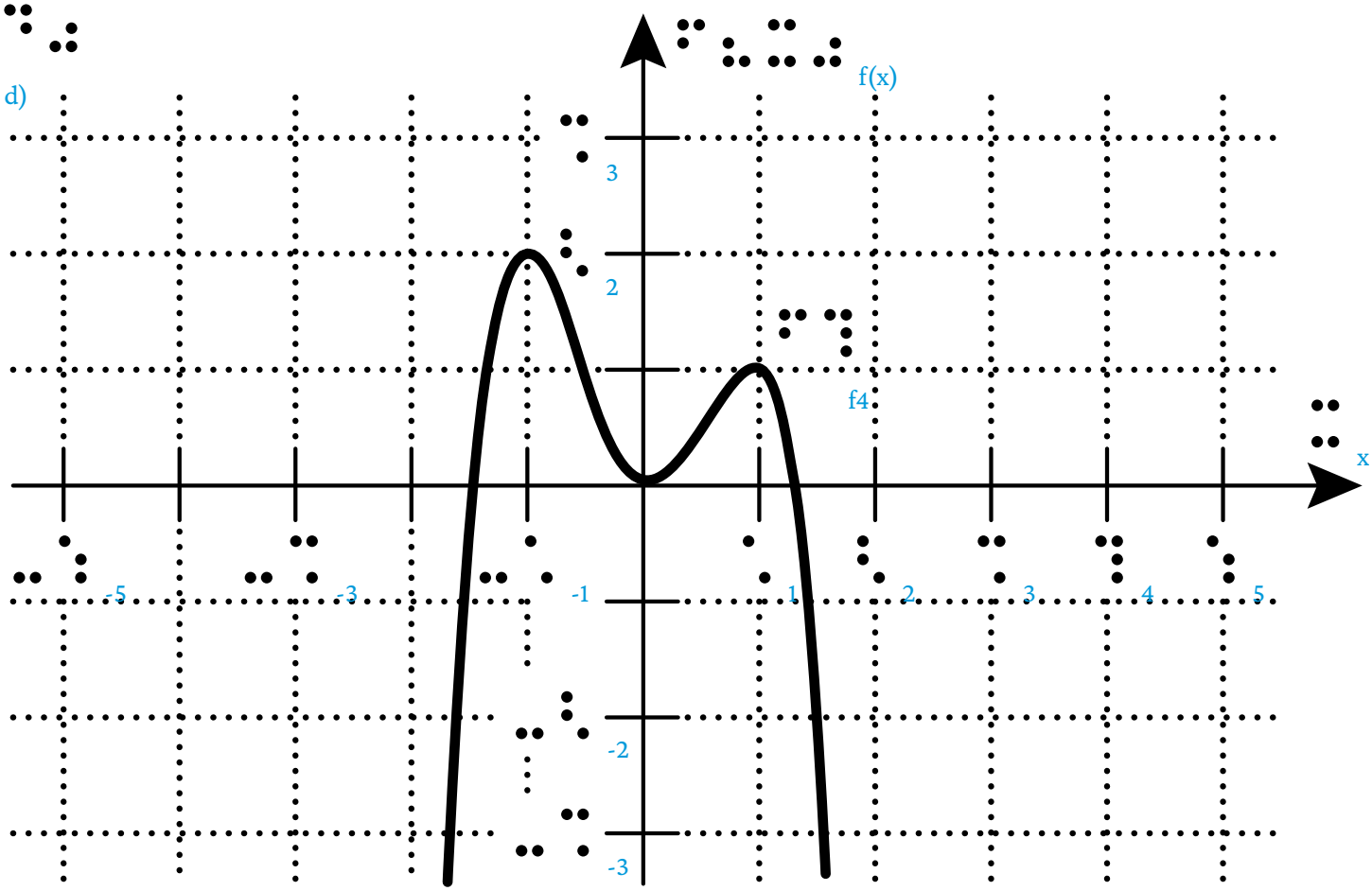


S.53 3.25 c, d

c)

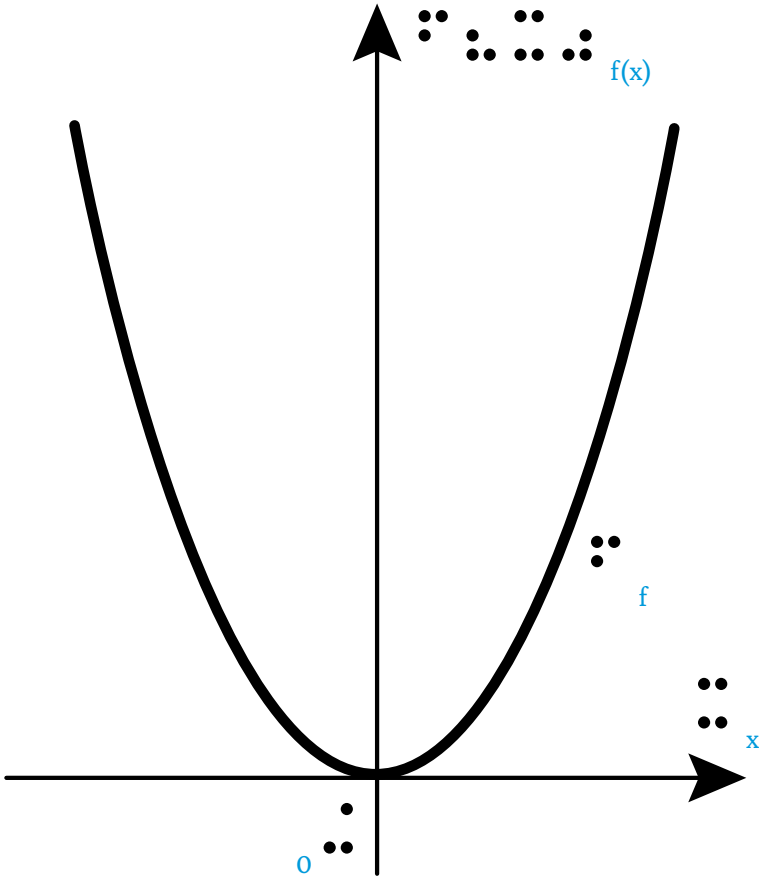


d)

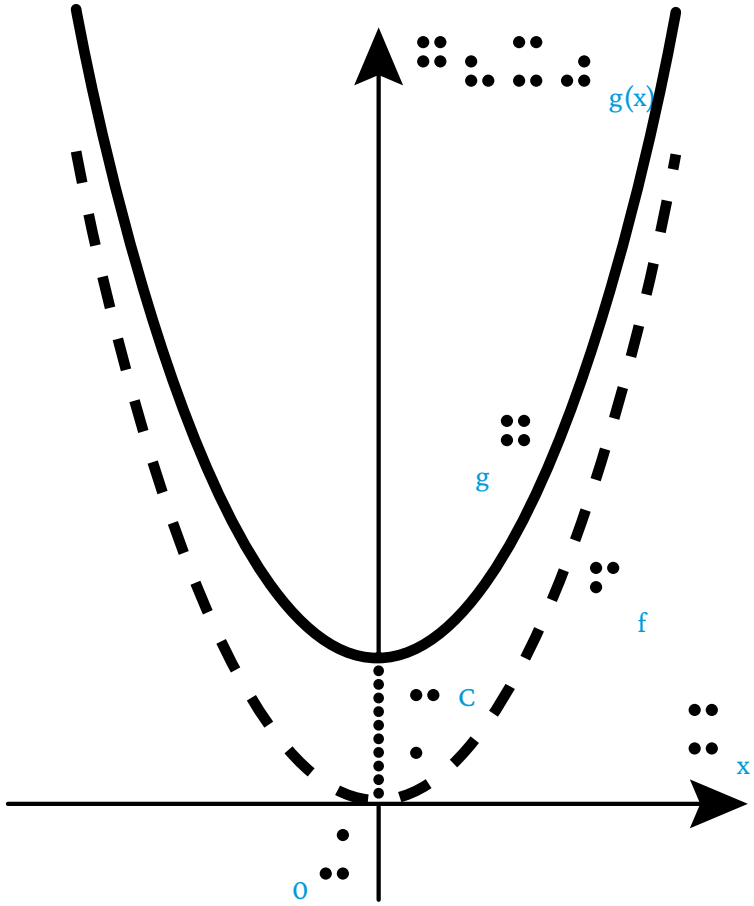


S.54 Veränderungen von Funktionsgraphen 1/2

Grundfunktion f: x --> x^2

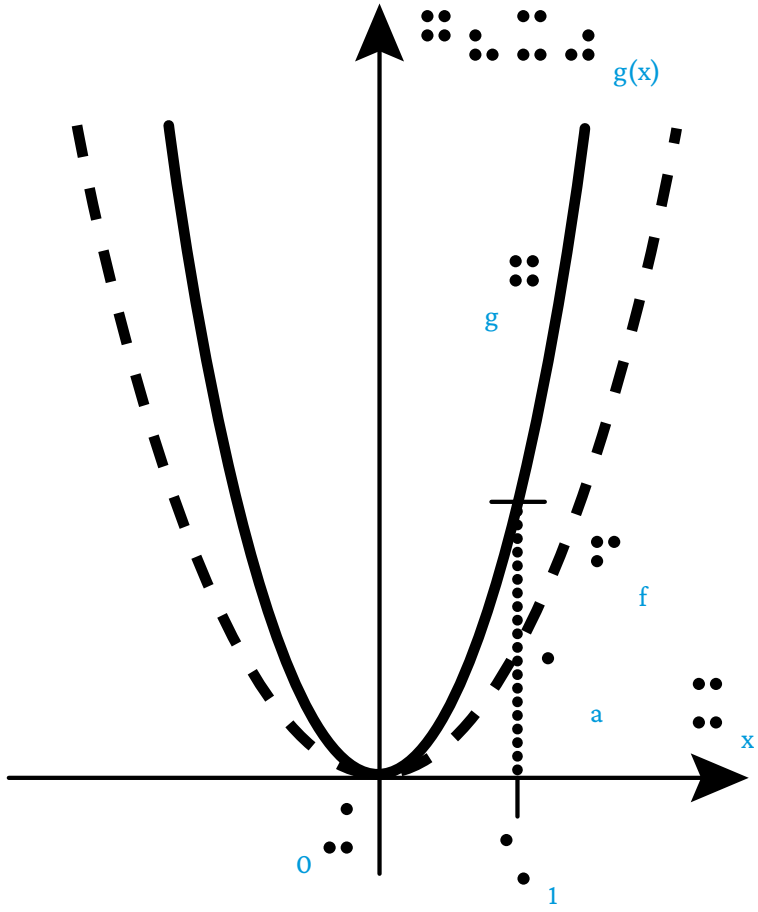


g(x) =f(x) +c

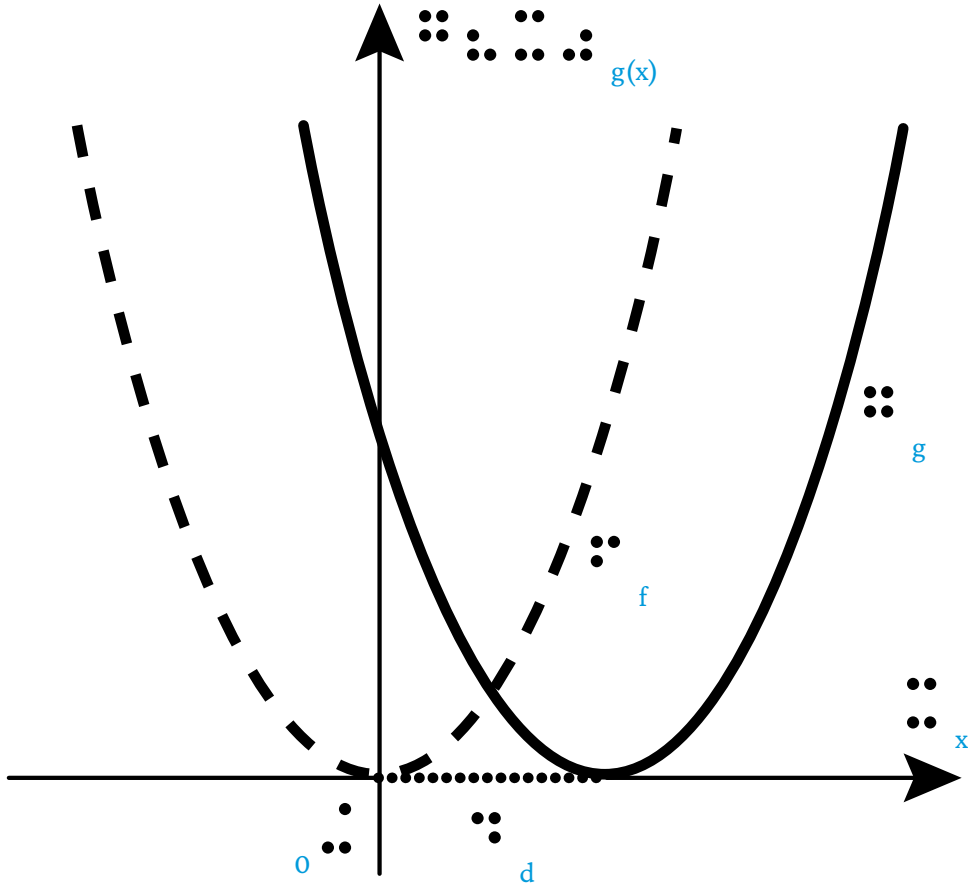


S.54 Veränderungen von Funktionsgraphen 2/2

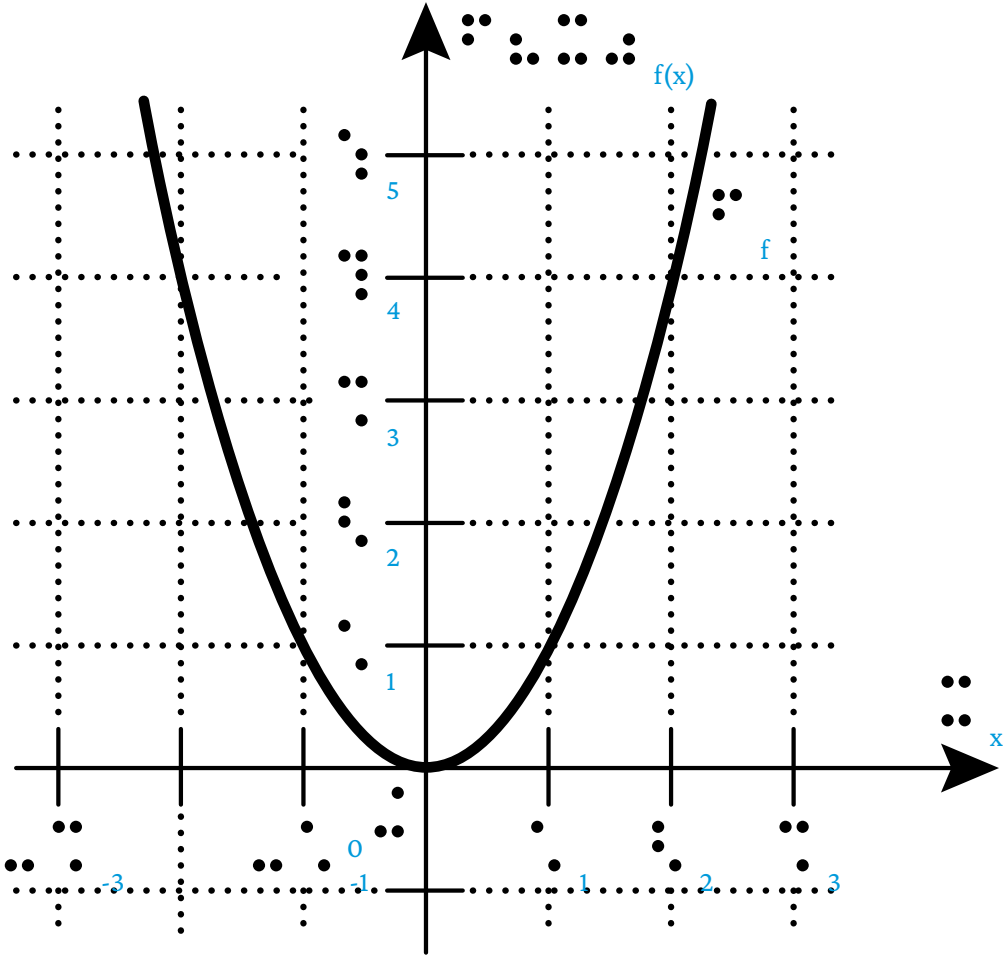
g(x) =a *f(x)



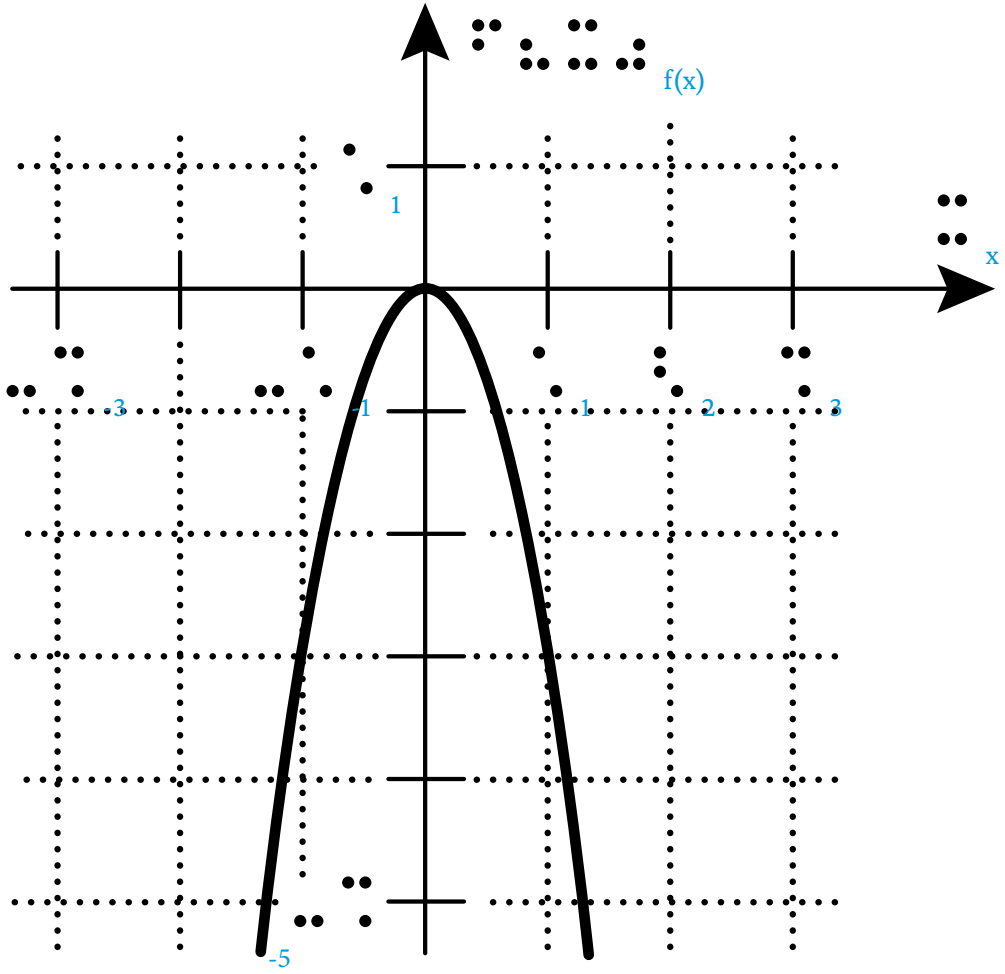
g(x) =f(x -d)



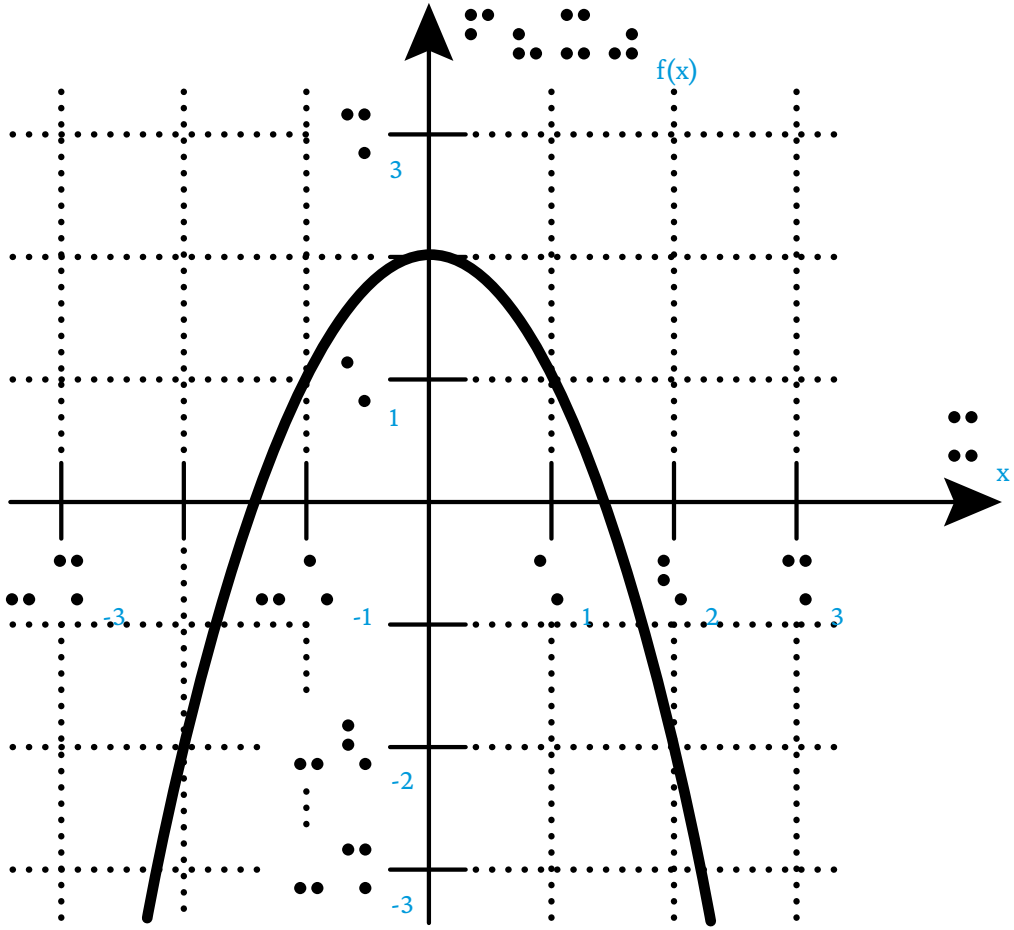
a)



b)



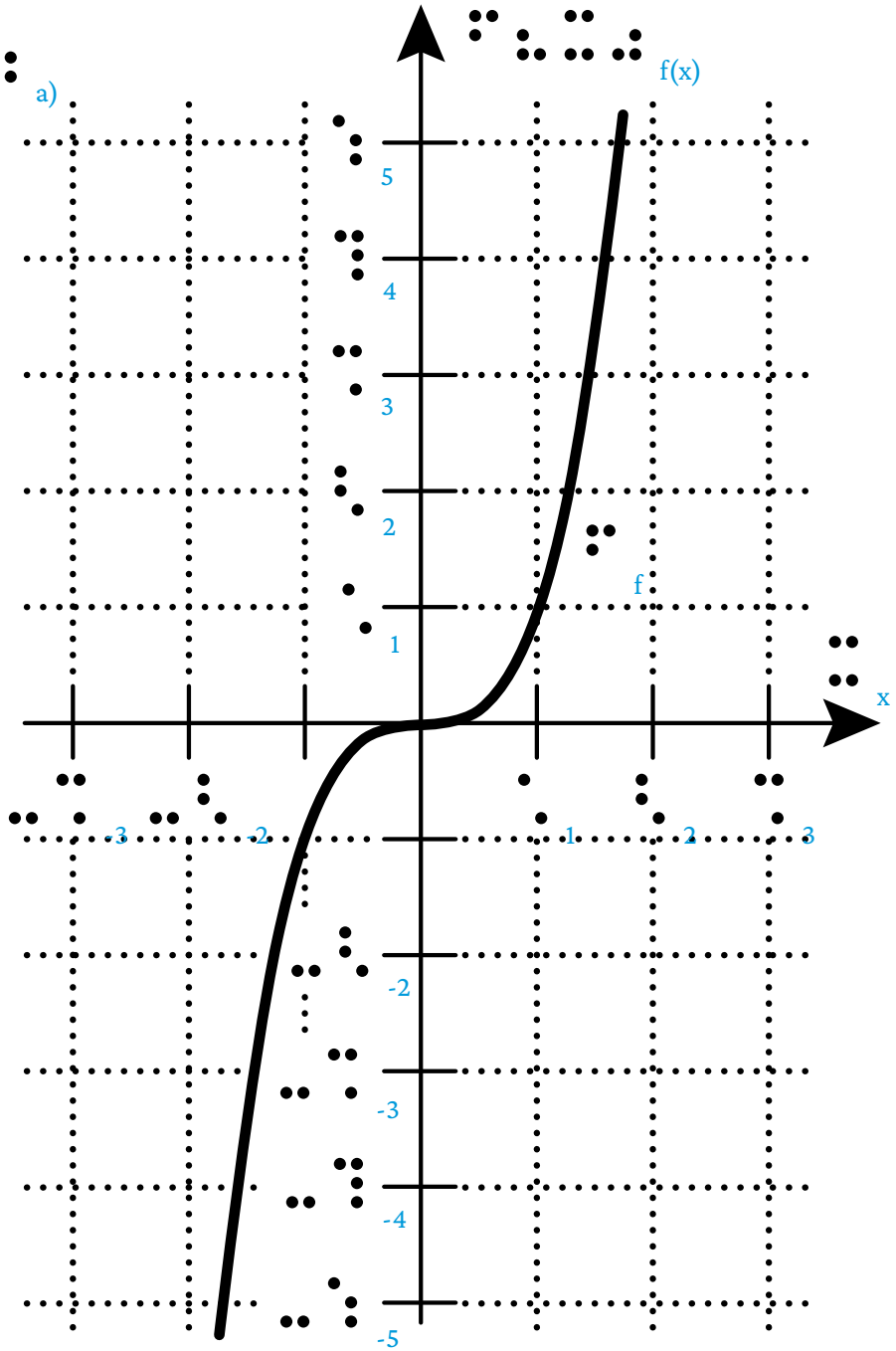
c)



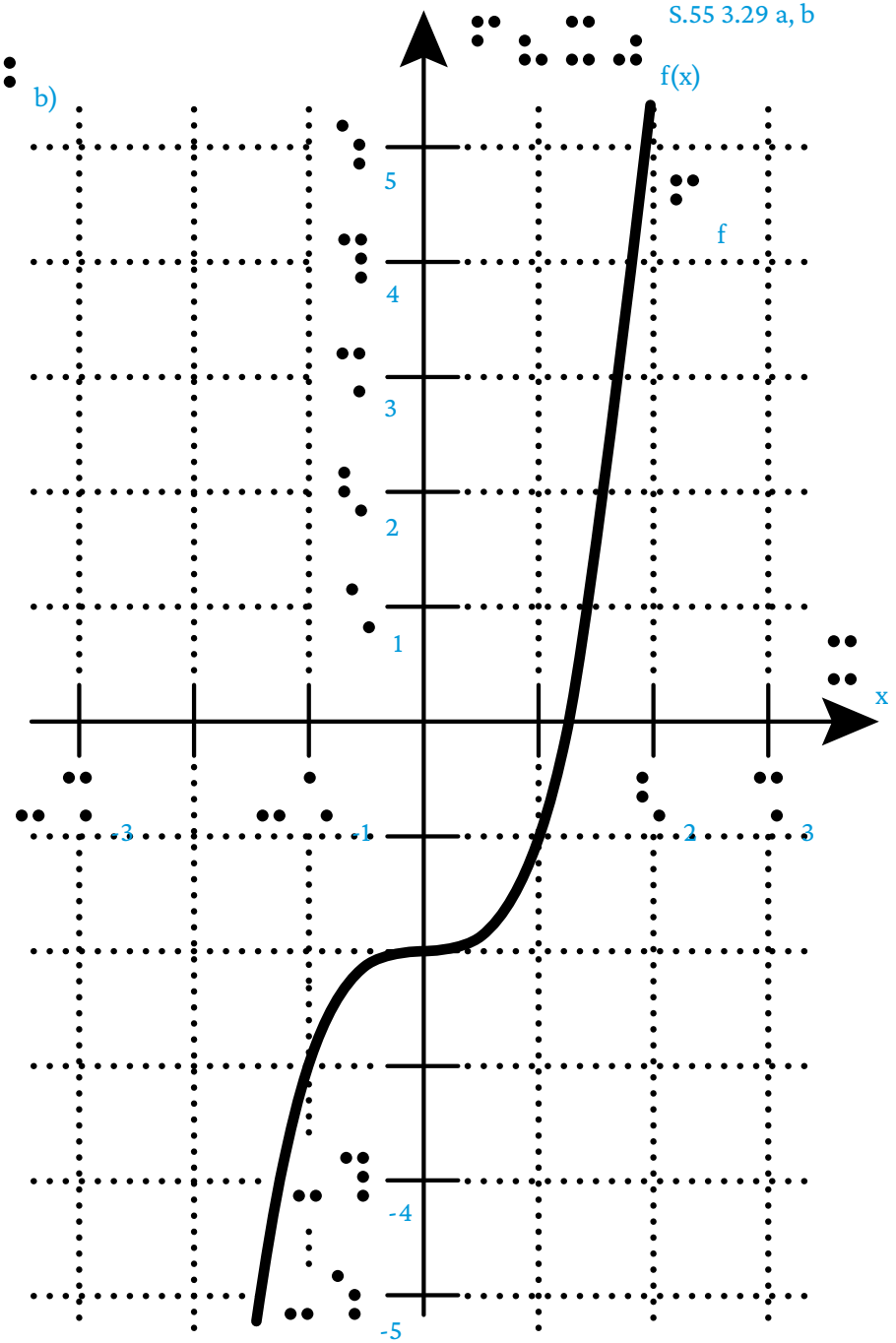
Mv6

S.55 3.29 a, b

a)



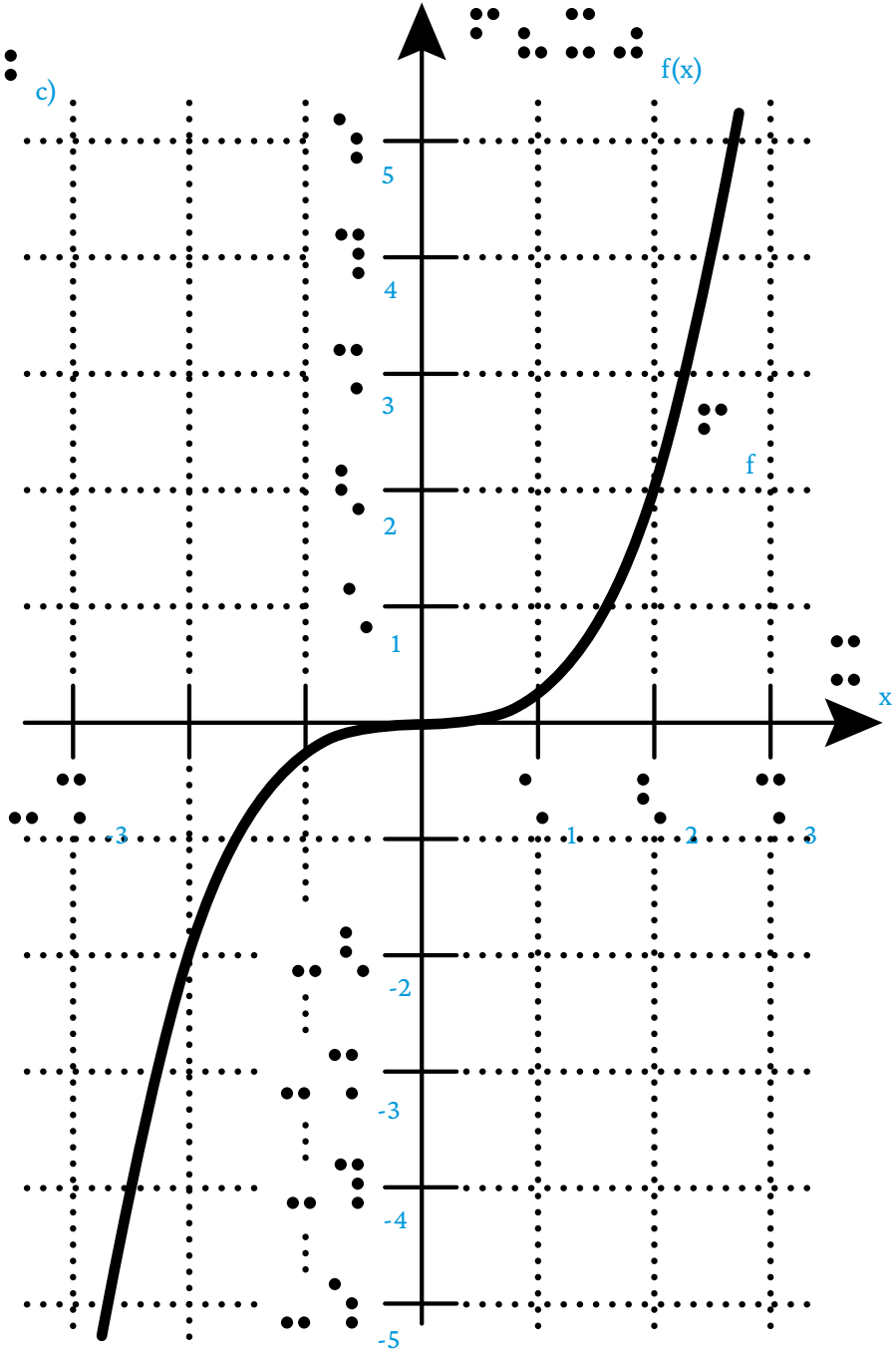
b)



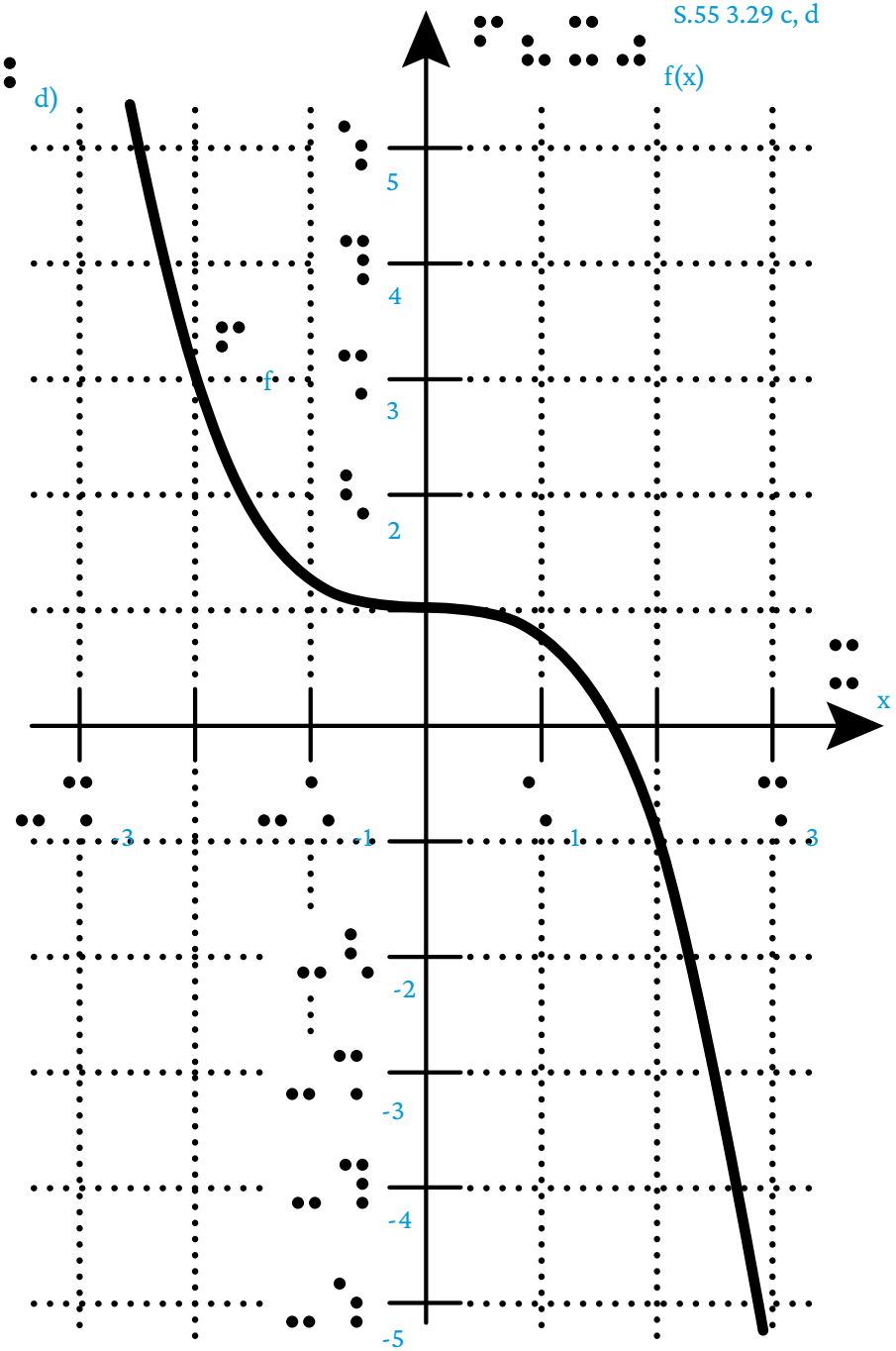
Mv6

S.55 3.29 c, d

c)



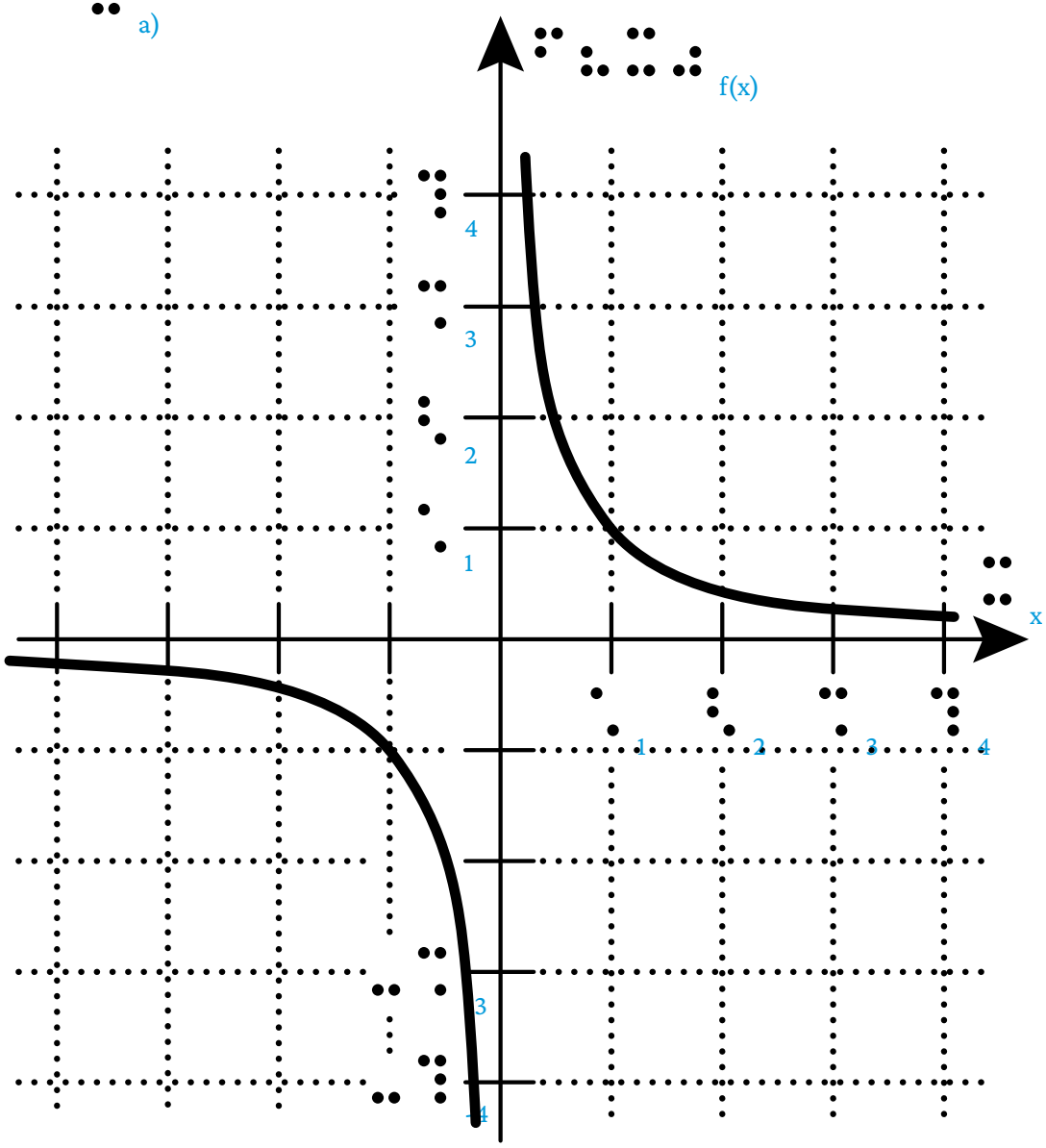
d)



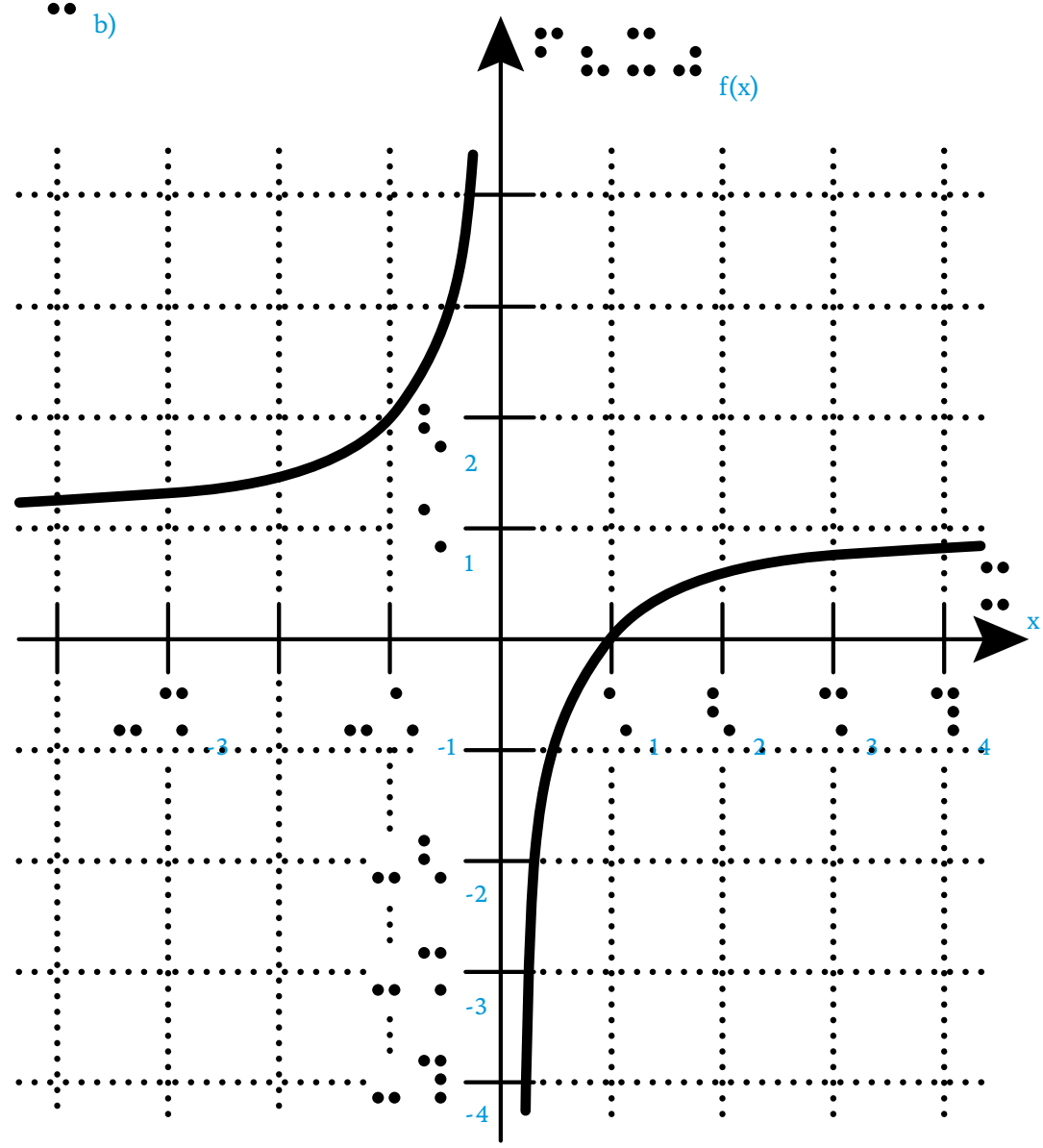
Mv6

S.55 3.30 a, b

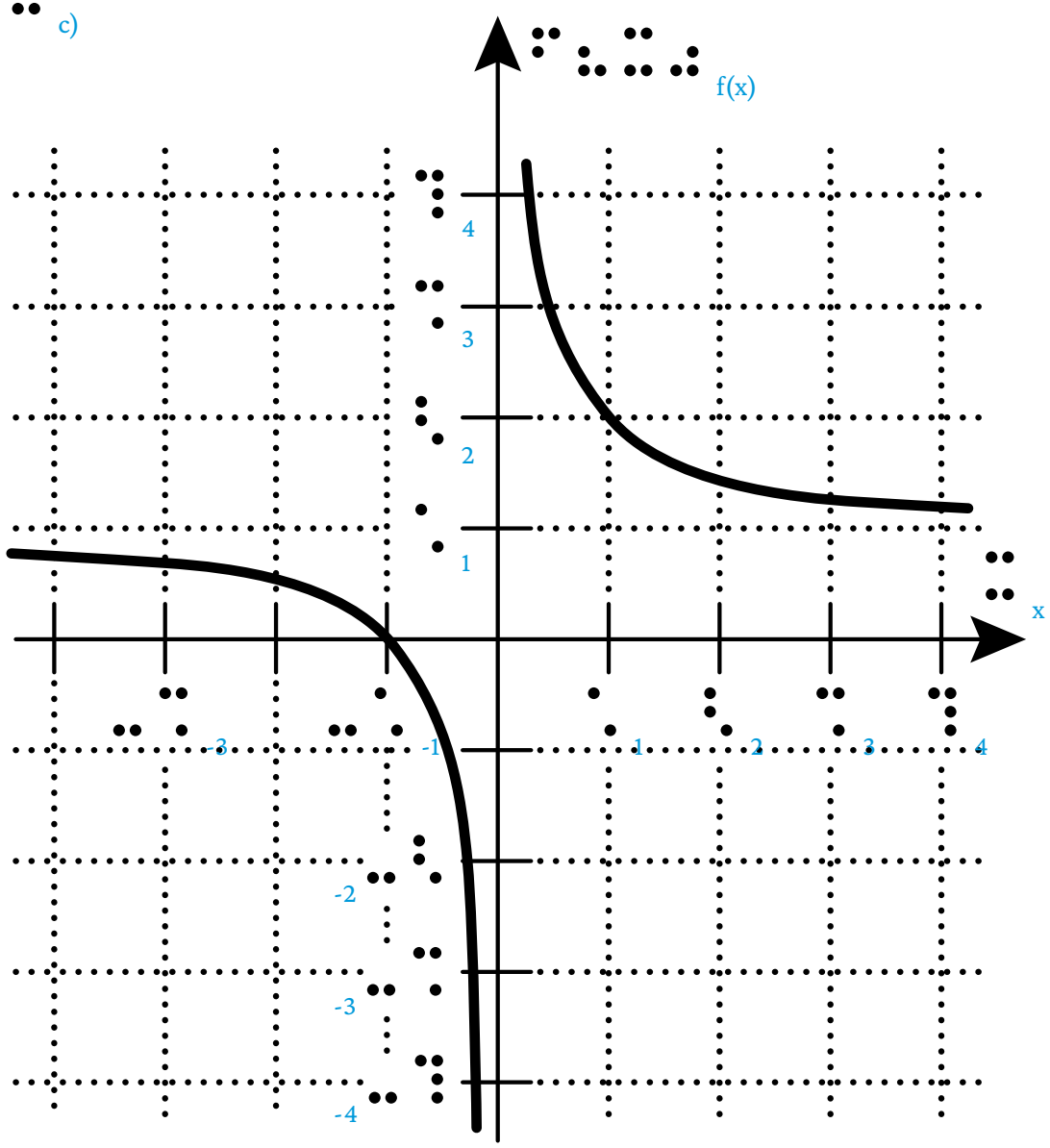
a)

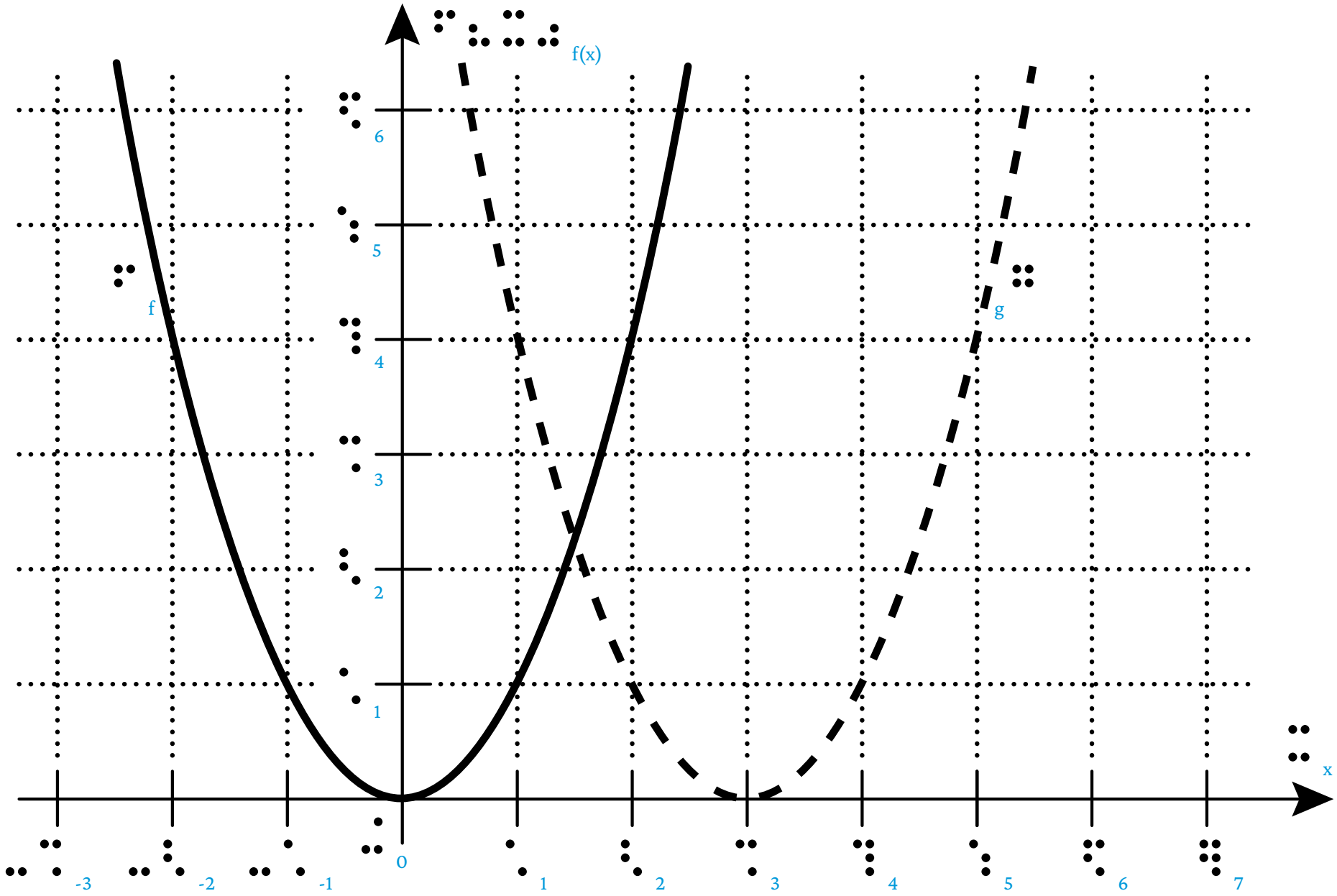


b)



c)




f(x)
f
g
x
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4
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1
0
-3
-2
-1
1
2
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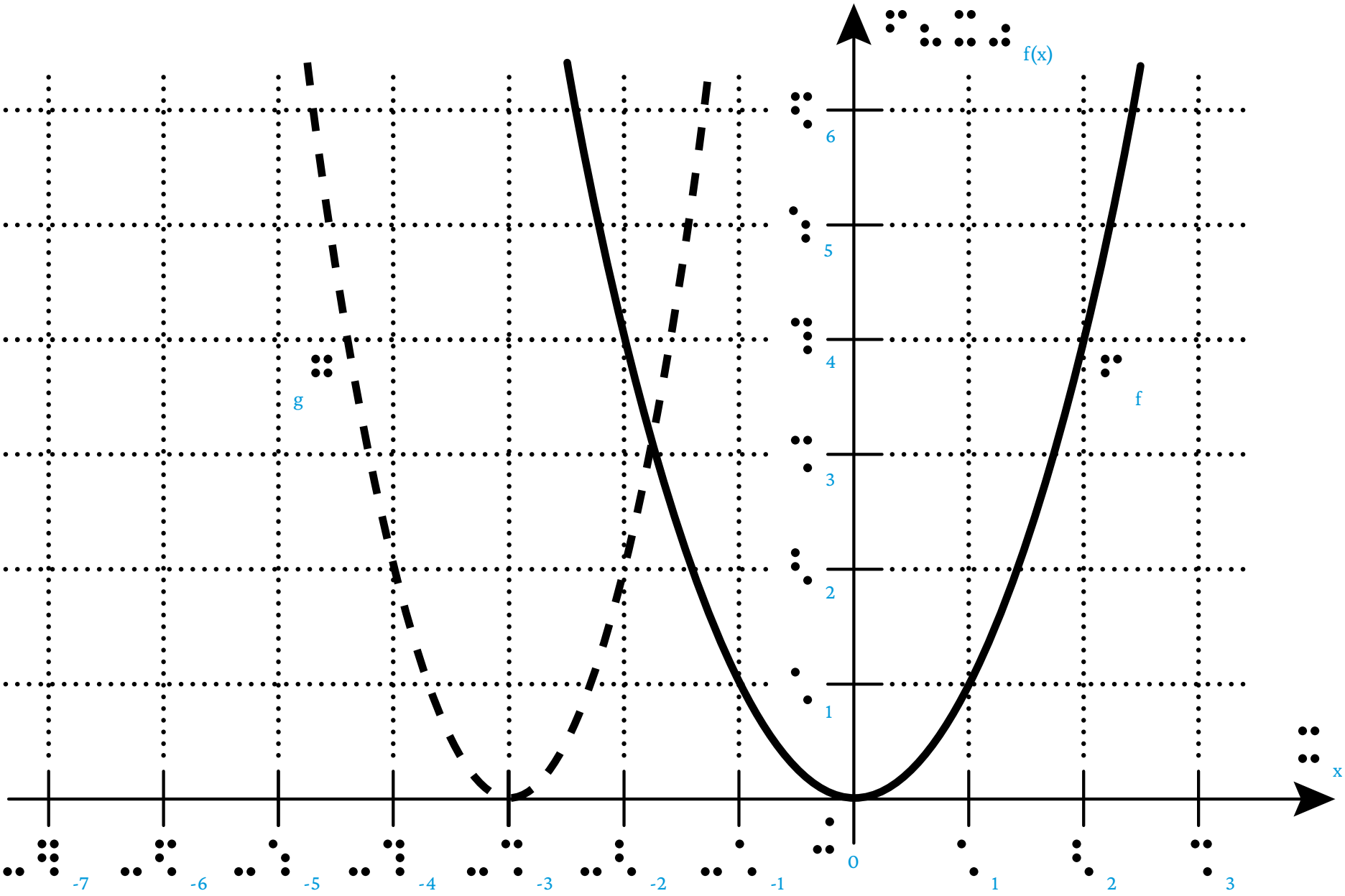
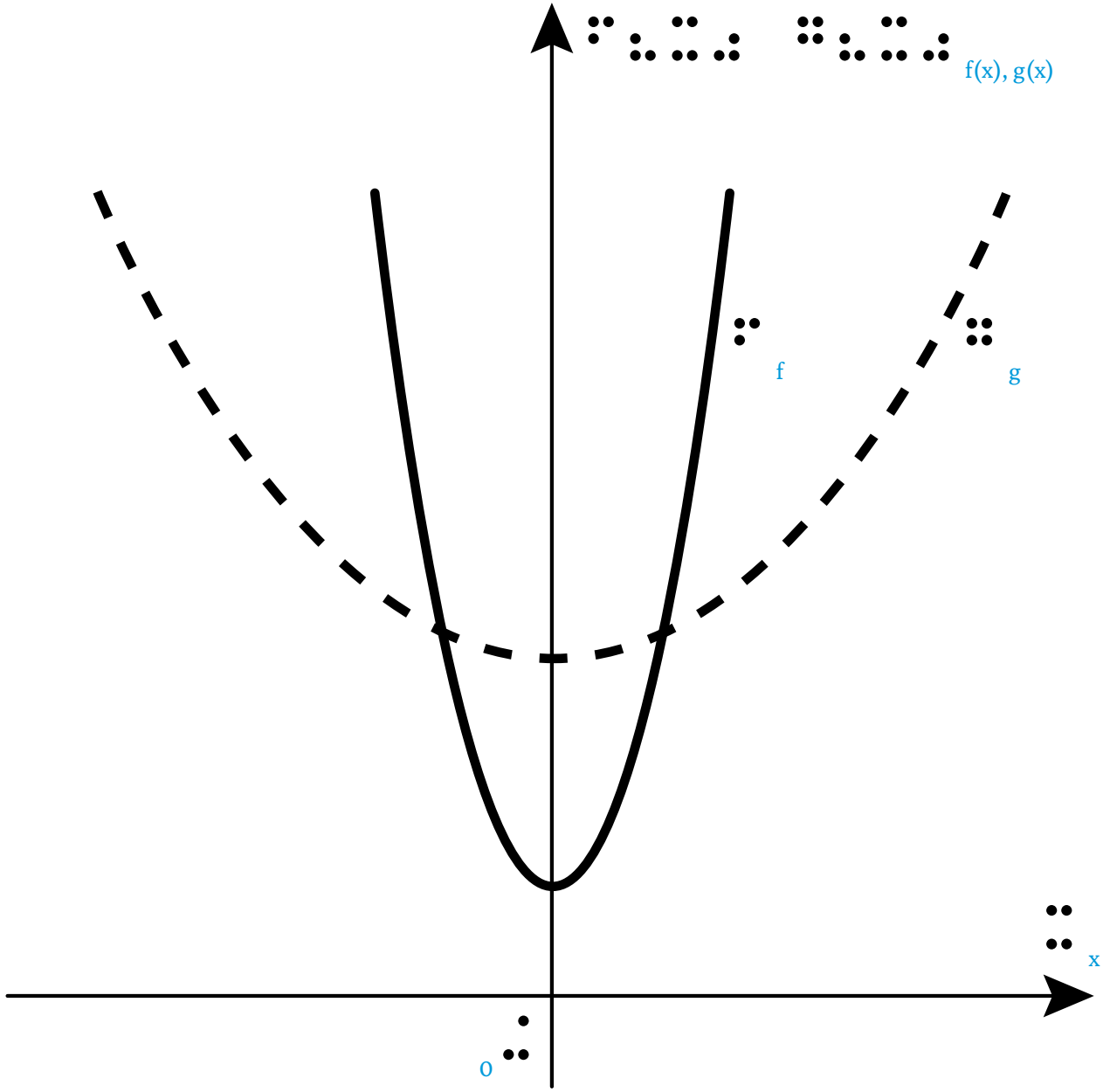
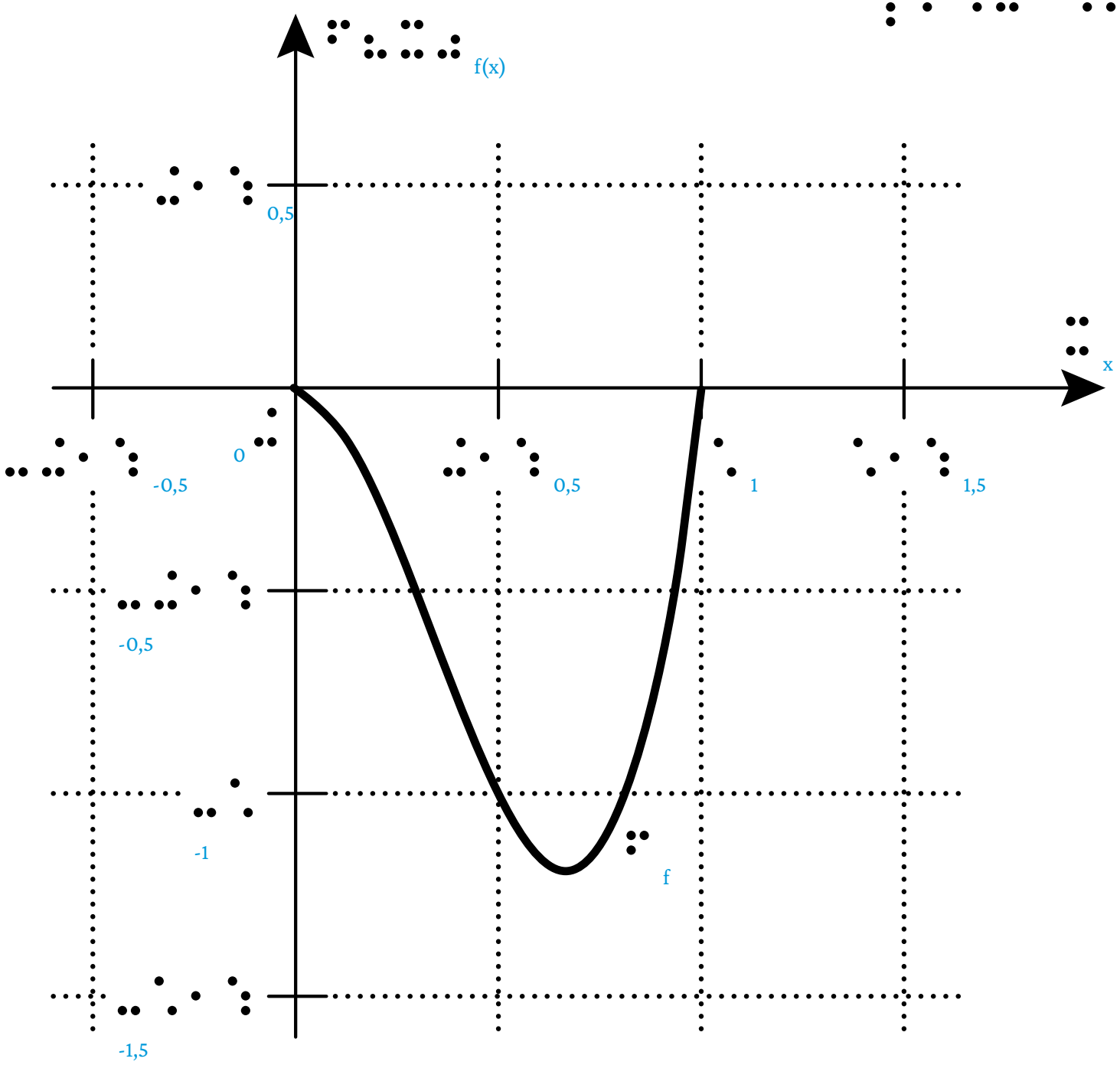
4
5
6
7


f(x)
6
5
4
3
2
1
g
f
x
-7
-6
-5
-4
-3
-2
-1
0
1
2
3


f(x), g(x)
f
g
x
0


f(x)
0,5
x
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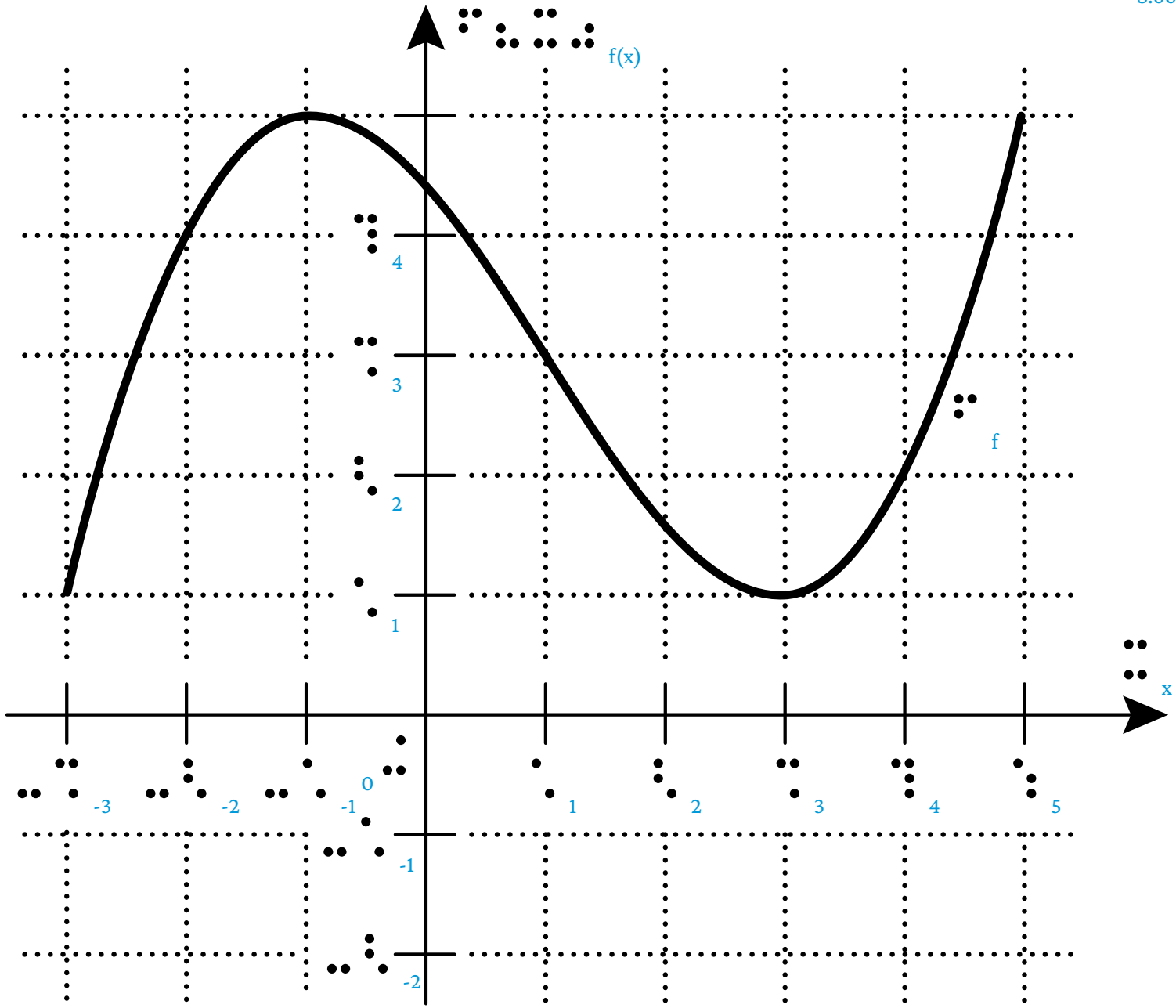
0,5
1
1,5
-0,5
-1
f
-1,5


f(x)
f
x
4
3
2
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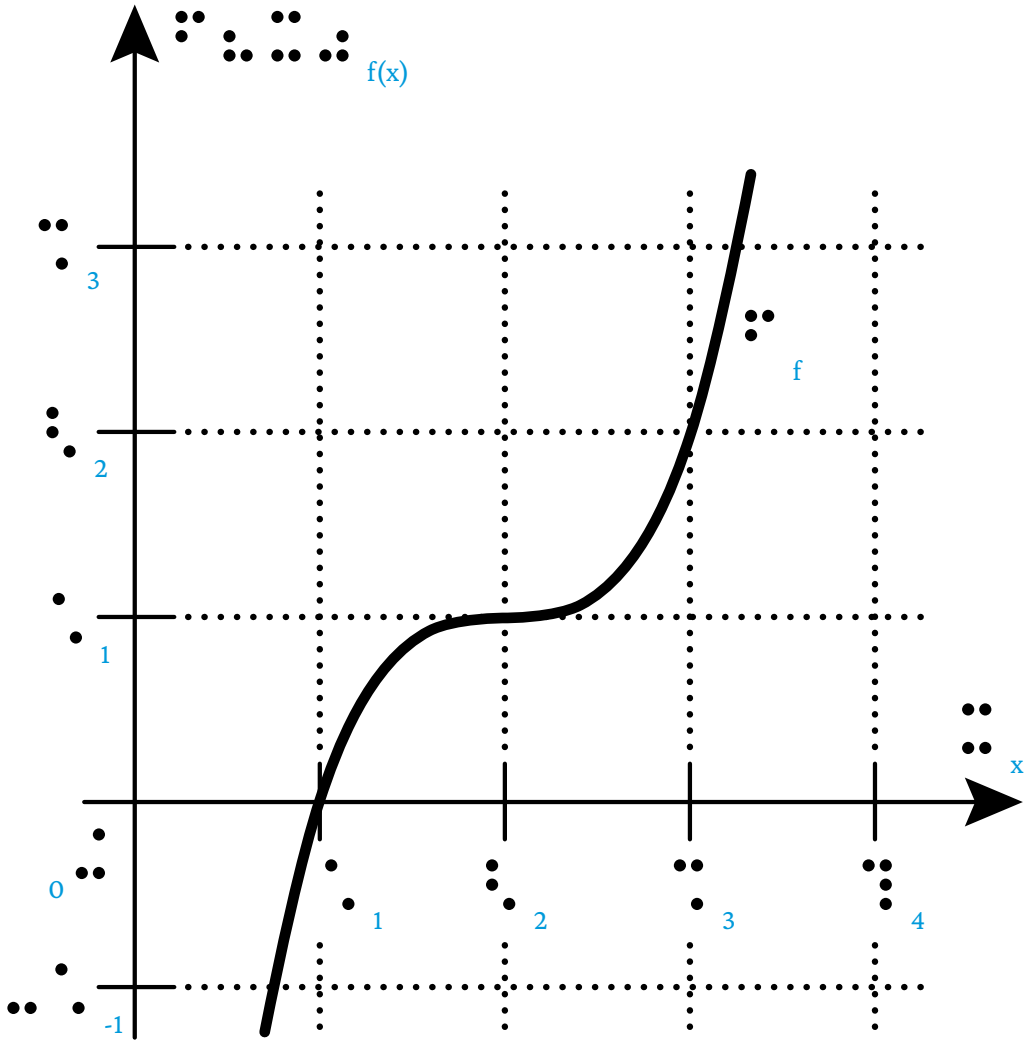
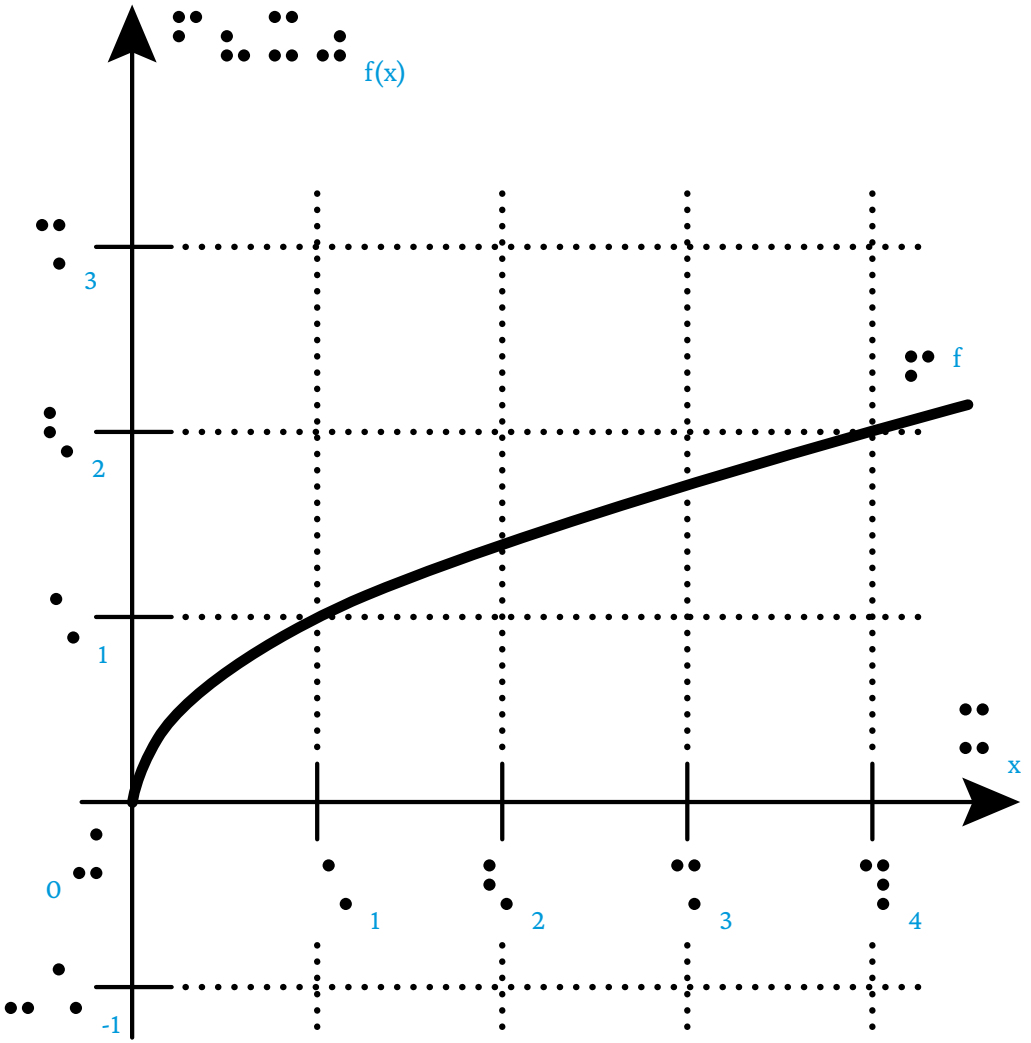
-1
-2
-3
-2
-1
0
1
2
3
4
5

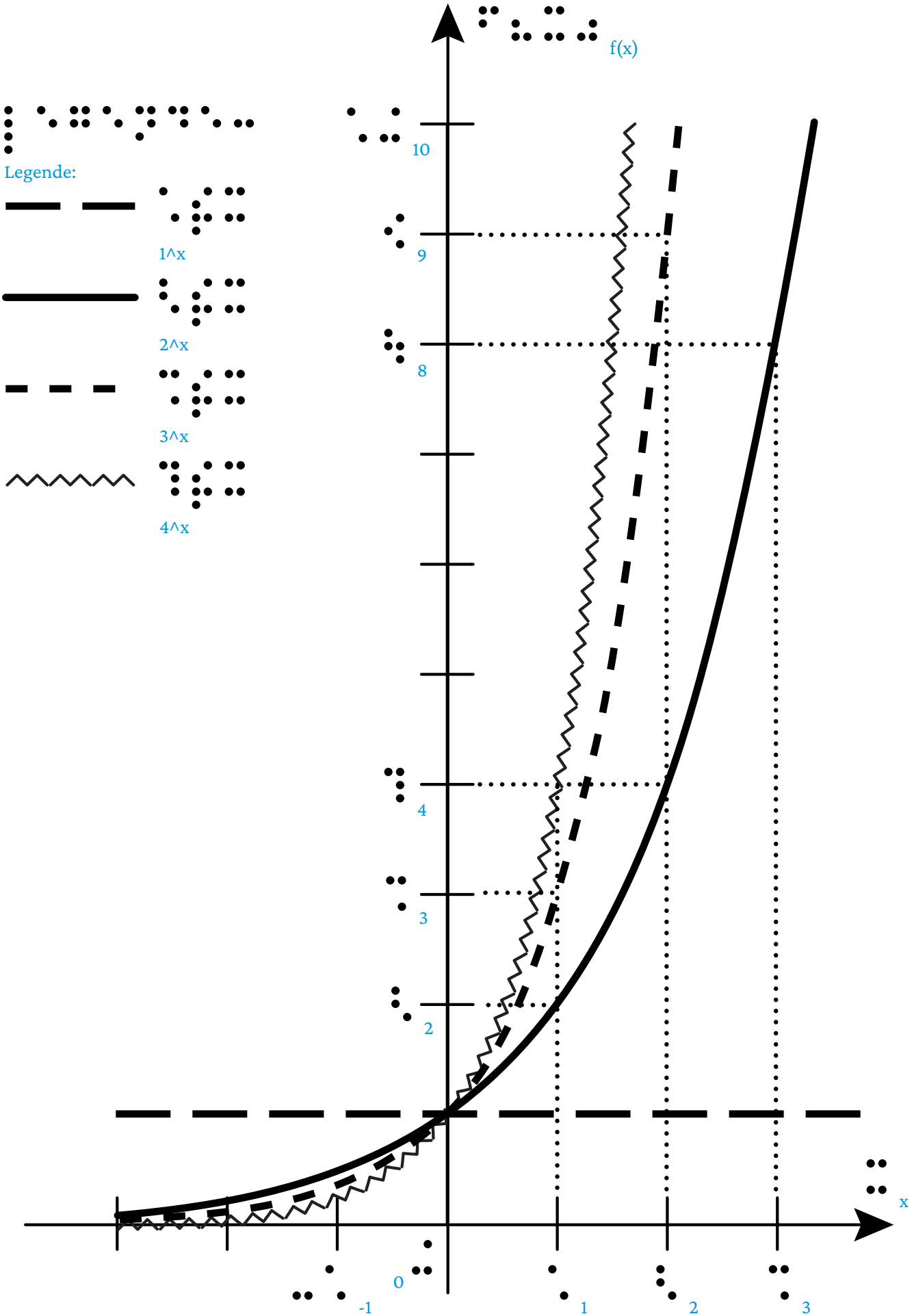

f(x)
3
2
1
0
-1
1
2
3
4
x
f

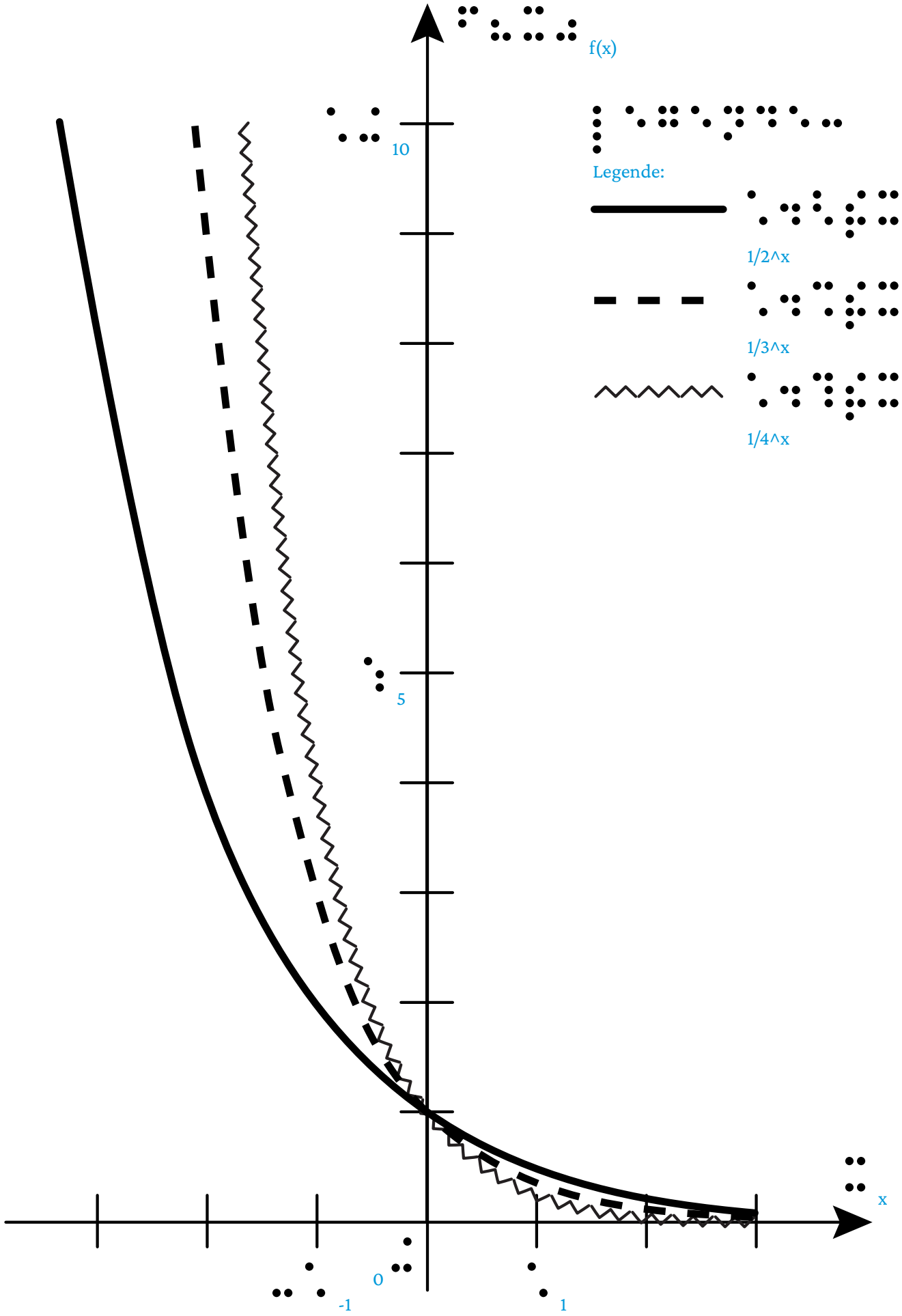

f(x)
3
2
1
0
-1
1
2
3
4
x
f

Mathematik verstehen 6

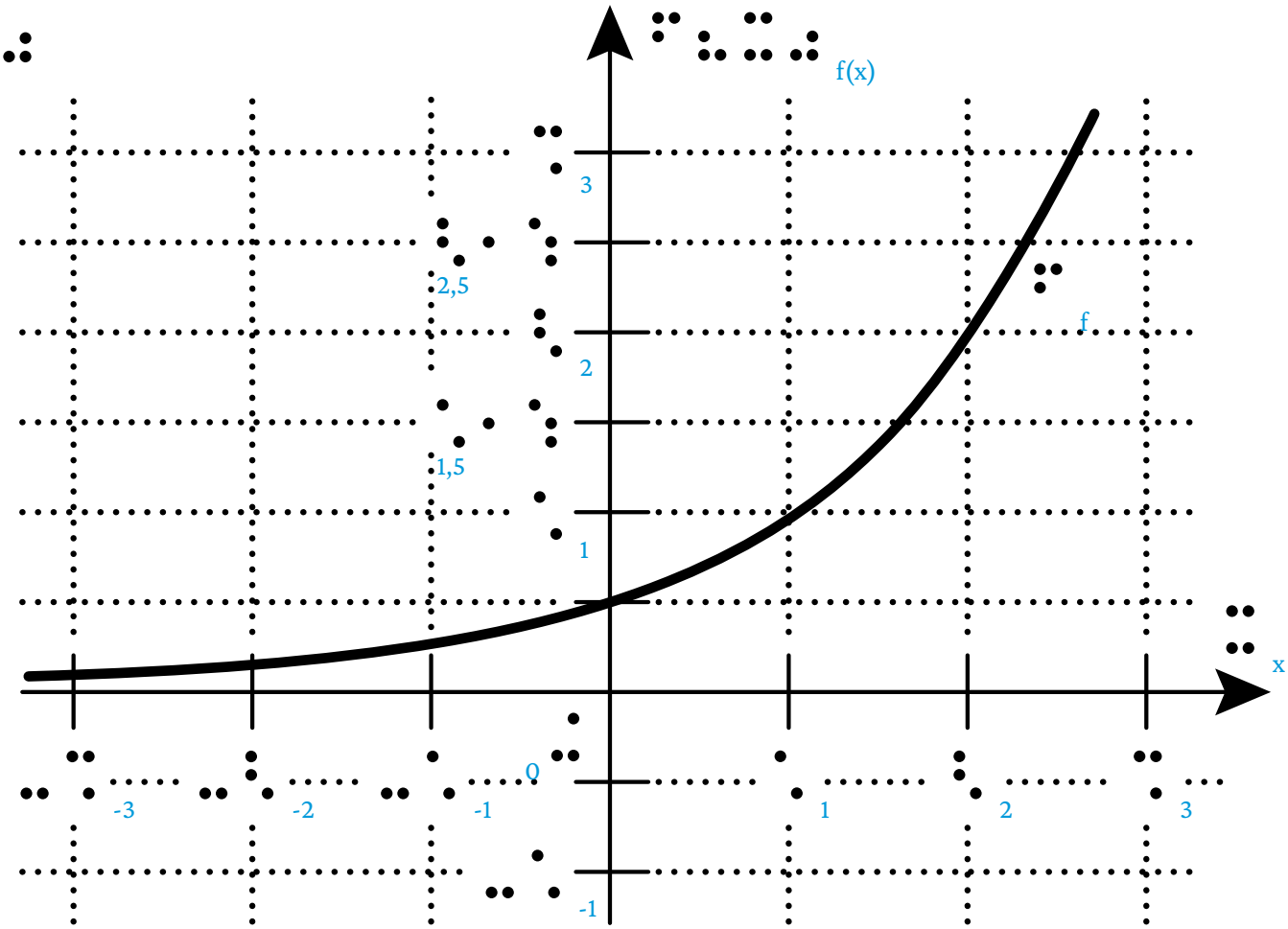
4

Exponential- und Logarithmusfunktionen

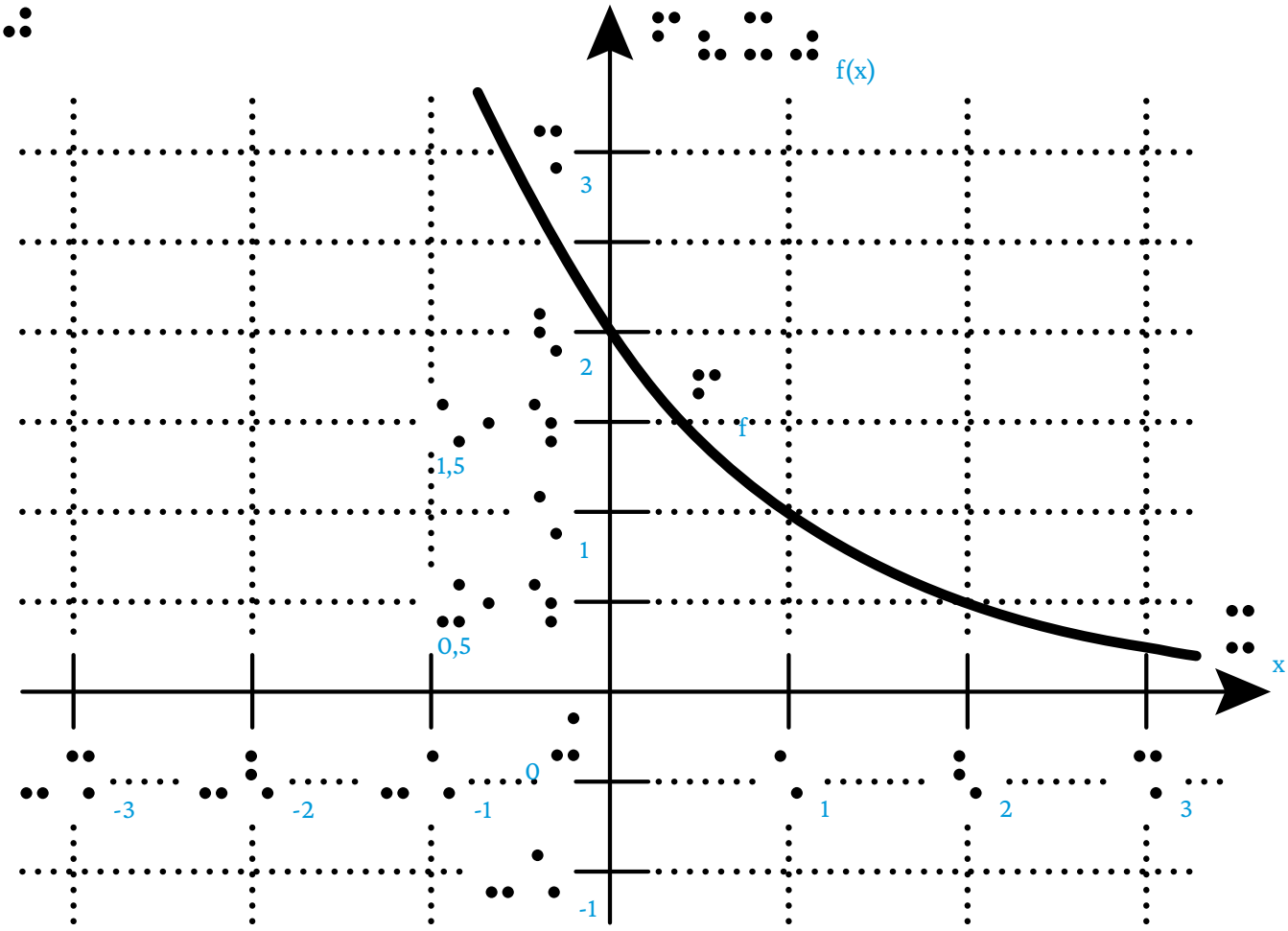

f(x)
Legende:
1^x
2^x
3^x
4^x
10
9
8
4
3
2
x
0
-1
1
2
3


f(x)
10
5
0
-1
1
x
Legende:
1/2^x
1/3^x
1/4^x

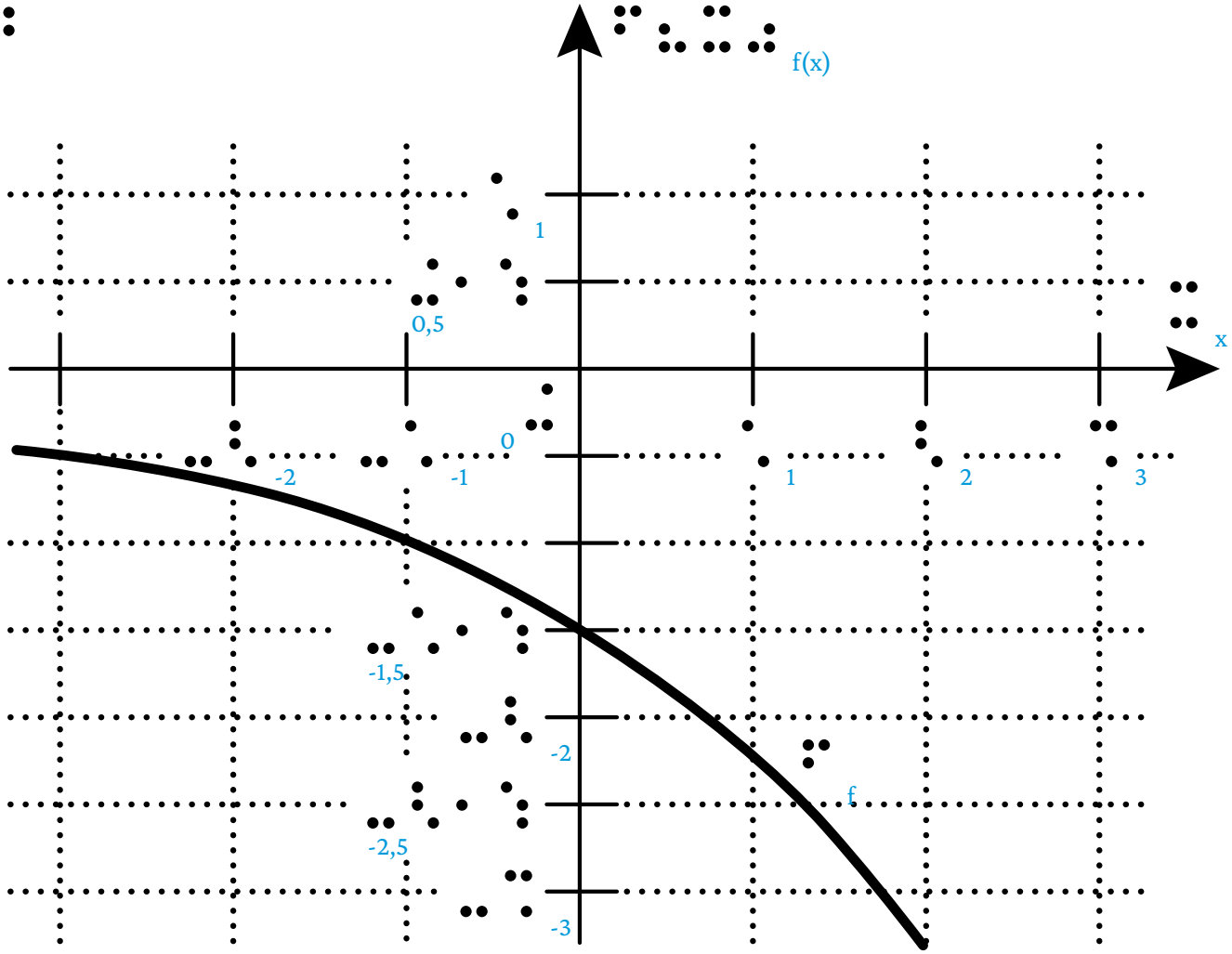
1)

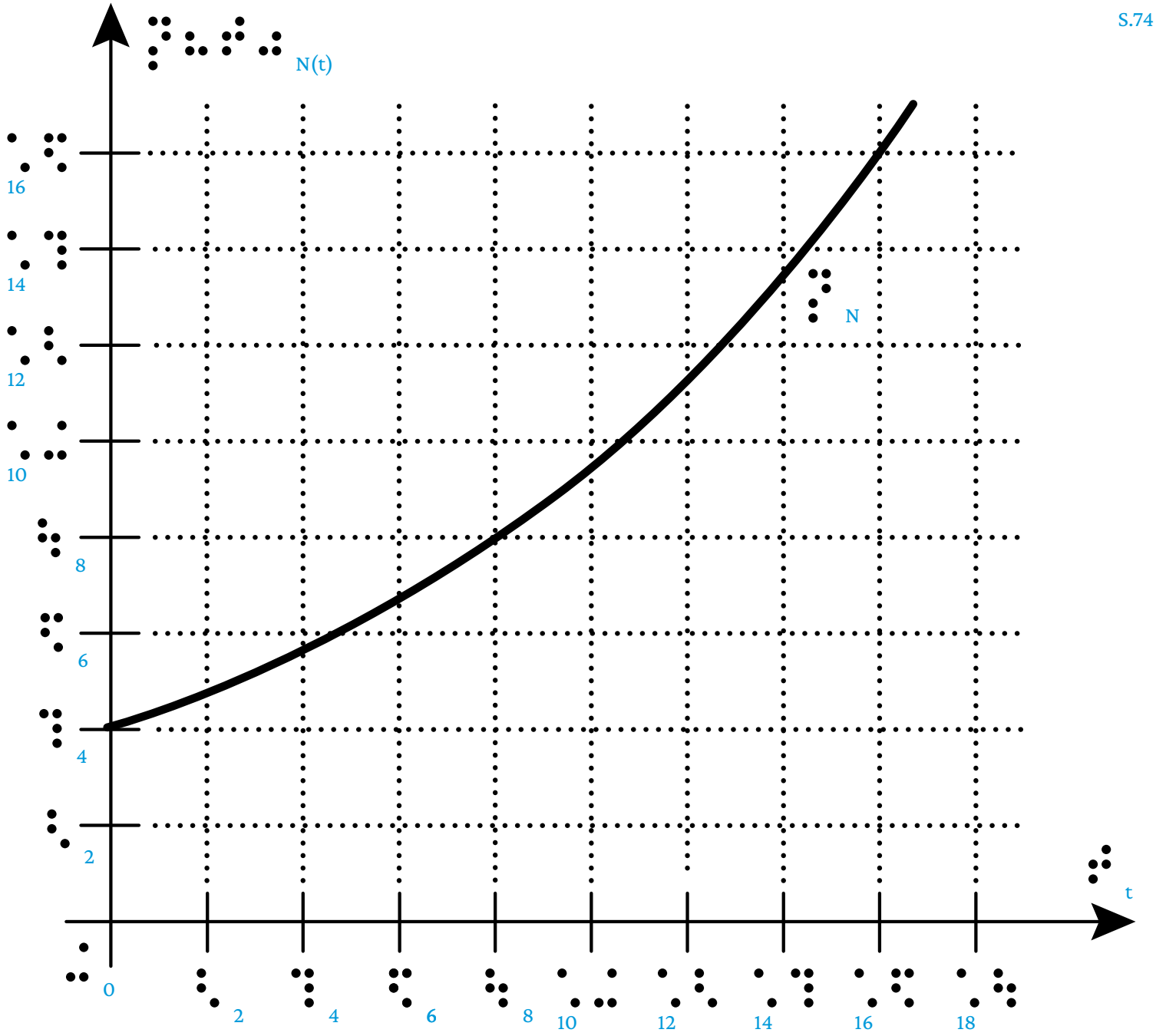


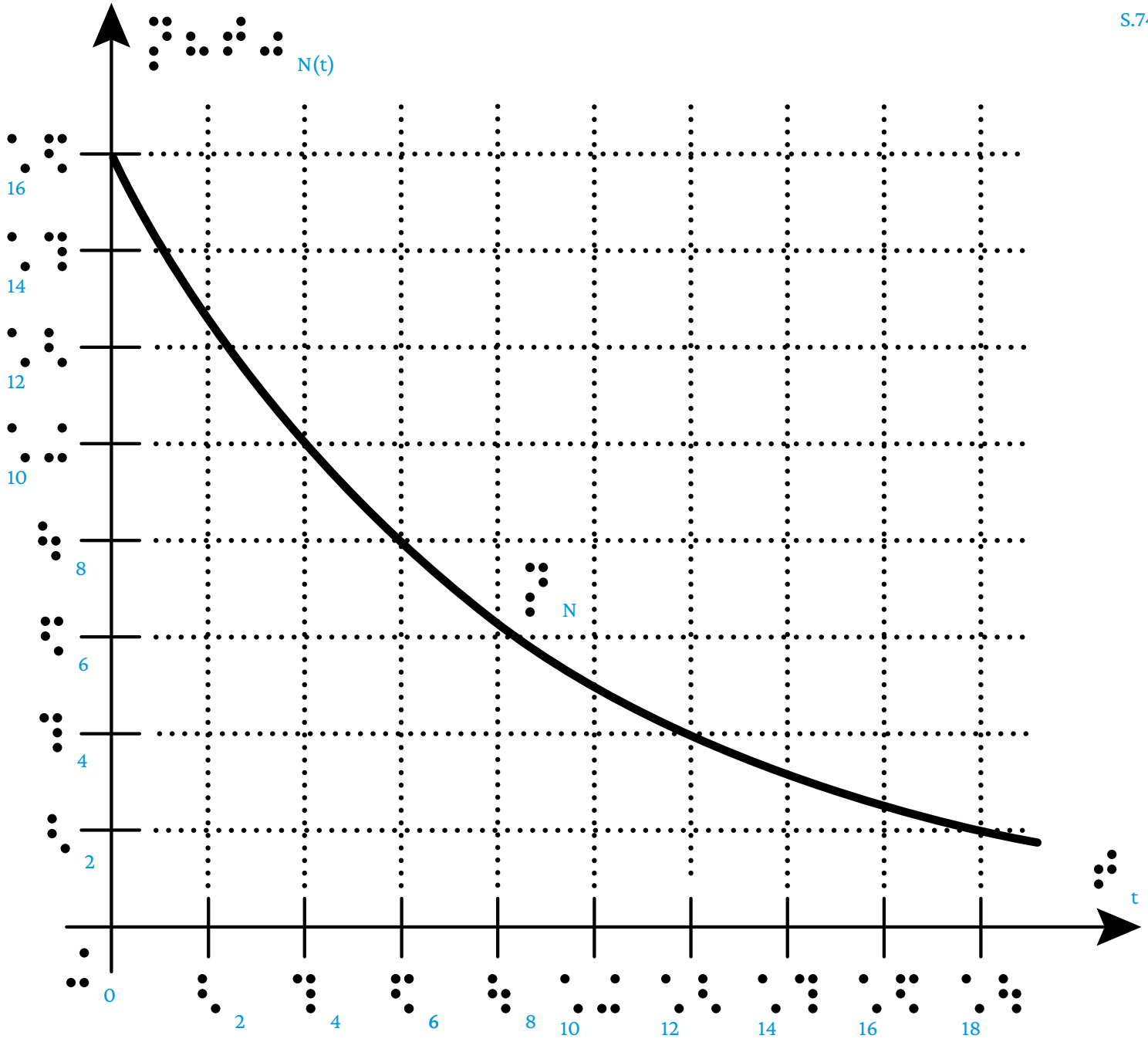
2)



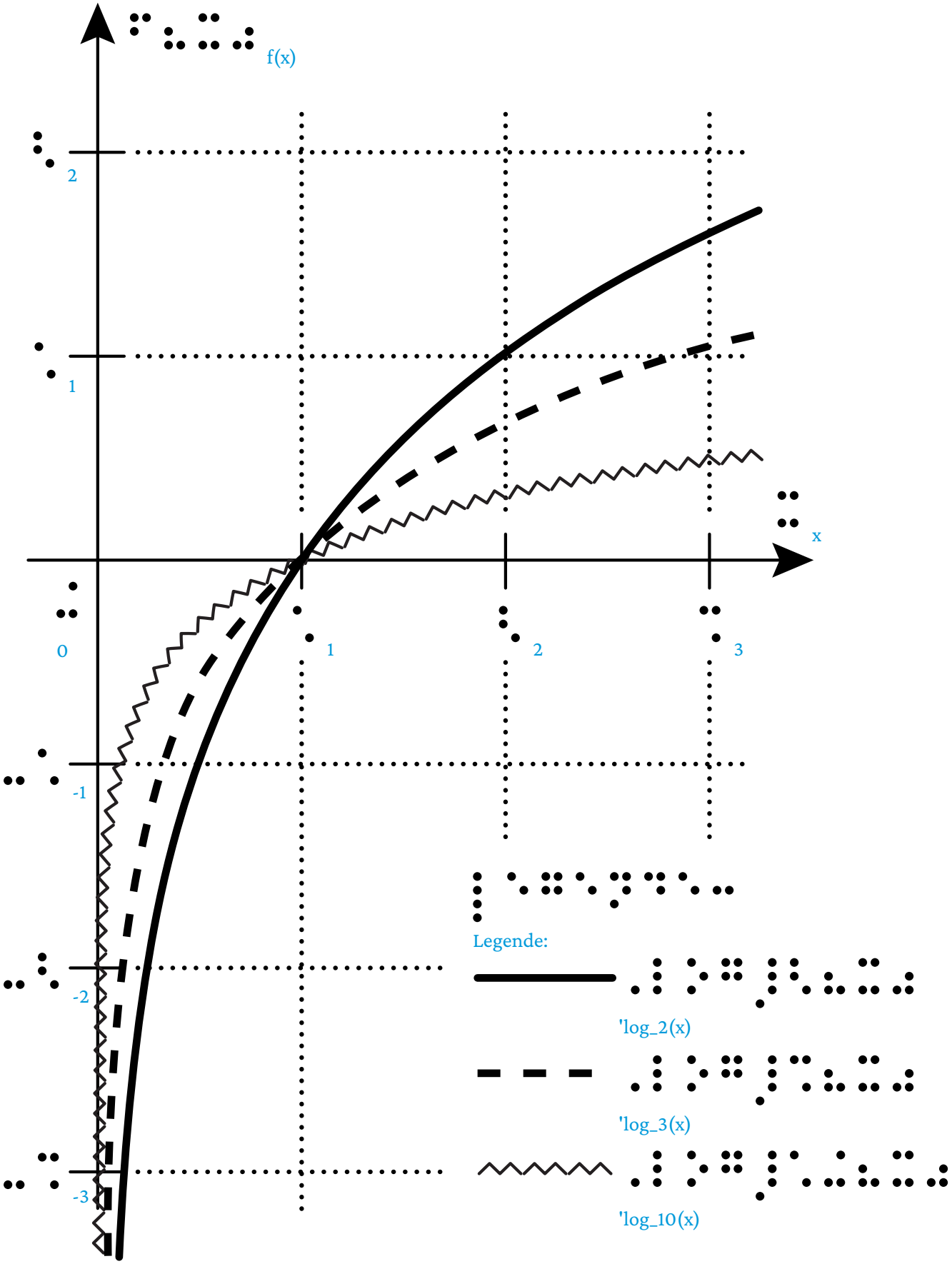
3)



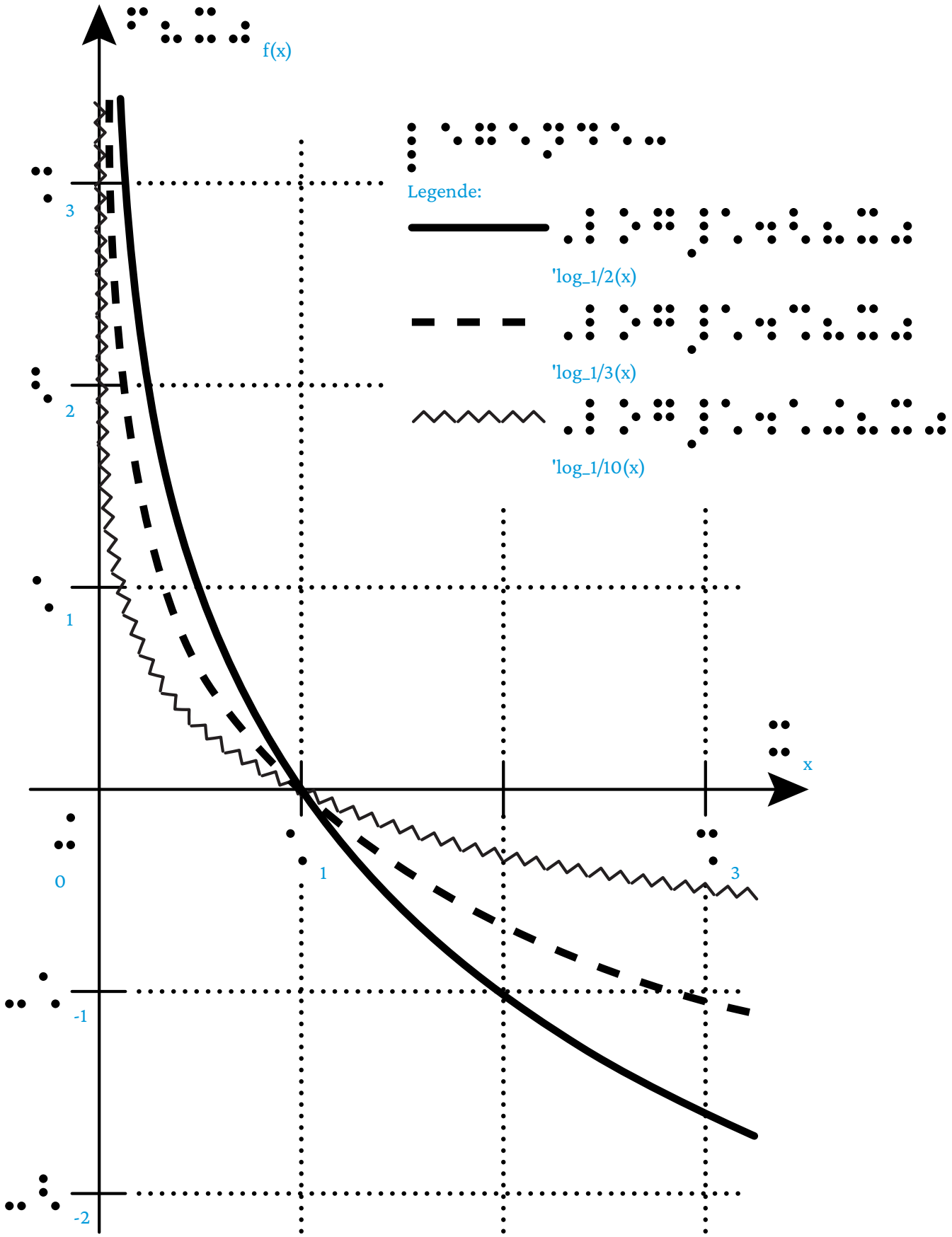

N(t)
16
14
12
10
8
6
4
2
0
N
t
2
4
6
8
10
12
14
16
18

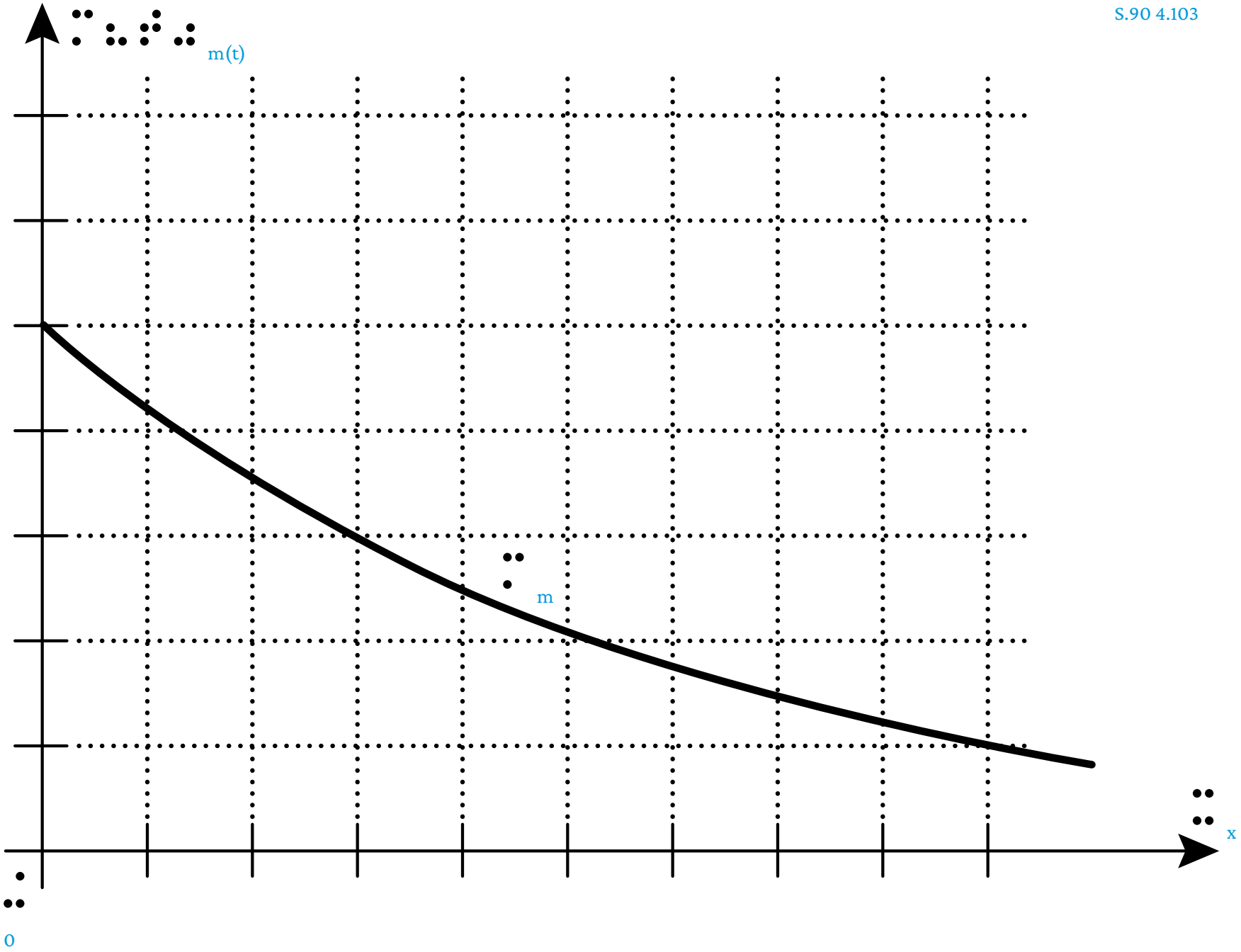

N(t)
16
14
12
10
8
6
4
2
N
t
0
2
4
6
8
10
12
14
16
18

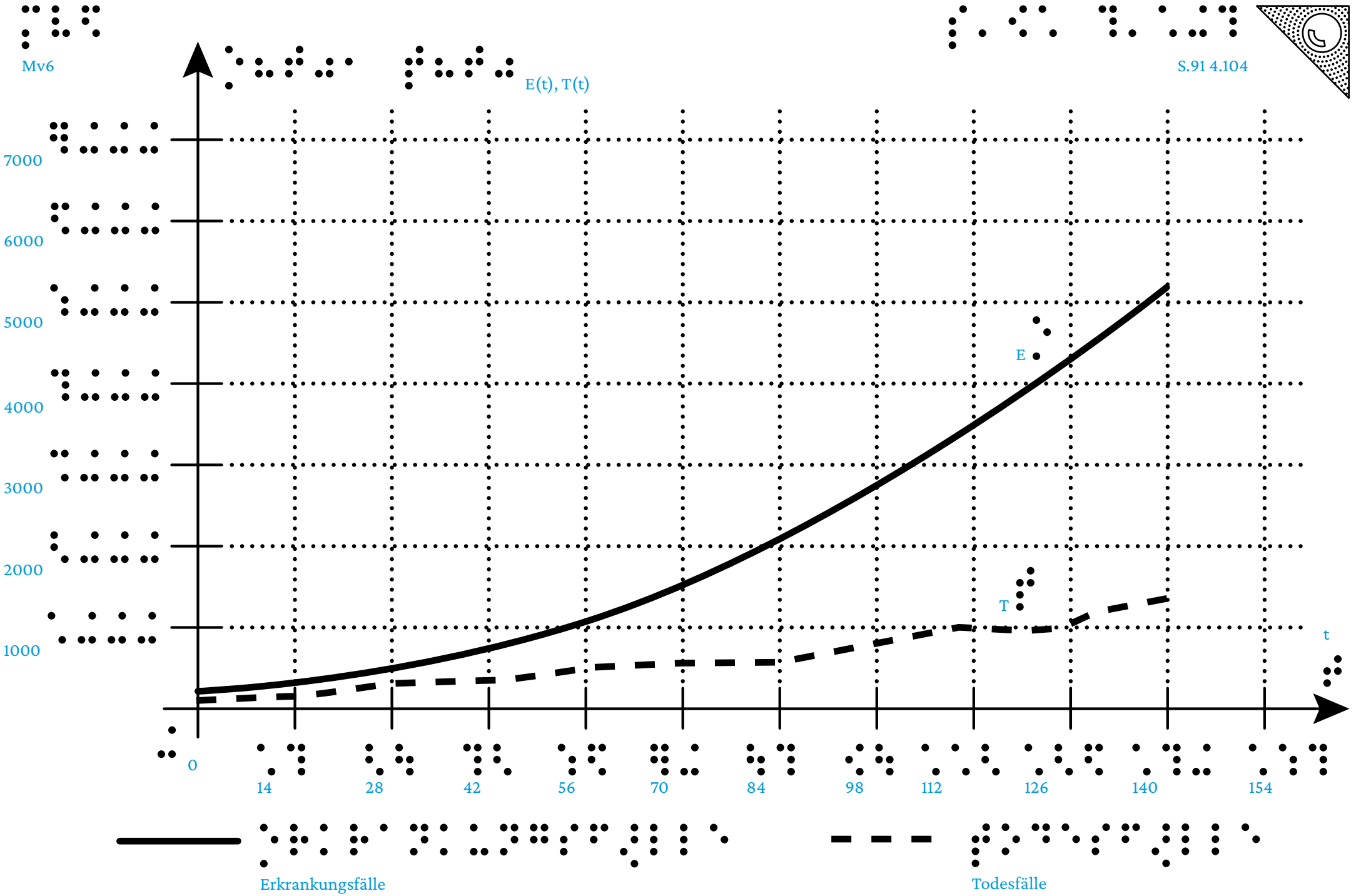
Logarithmusfunktionen mit a >1



Logarithmusfunktionen mit 0 <a <1




m(t)
m
x
0


E(t), T(t)
7000
6000
5000
4000
3000
2000
1000
E
T
t
0
14
28
42
56
70
84
98
112
126
140
154
Erkrankungsfälle
Todesfälle