Priklad 2:

Nalezněte všechny (lokální i globální) extrémy funkce f(x) na intervalu [-1 , 1], resp. v intervalu [2 , 3]:

$$f(x) = \frac{x^2 - 1}{x^2 - 5x + 6}$$

x	f(x)
-10	
-9.9	
-9.8	
-9.7	
-9.6	
-9.5	
-9.4	
-9.3	
-9.2	
-9.1	
-9	
-8.9	
-8.8	
-8.7	
-8.6	
-8.5	
-8.4	
-8.3	
-8.2	
-8.1	
-8	
-7.9	
-7.8	
-7.7	
-7.6	
-7.5	
-7.4	
-7.3	
-7.2	
-7.1	
-7	
-6.9	
-6.8	
-6.7	
-6.6	
-6.5	
-6.4	
-6.3	
-6.2	
-6.1	
-6	
-5.9	

-5.8
-5.7
-5.6
-5.5
-5.4
-5.3
-5.2
-5.1
-5
-4.9
-4.8
-4.7
-4.6
-4.5
-4.4
-4.3
-4.2
-4.1
-4
-3.9
-3.8
-3.7
-3.6
-3.5
-3.4
-3.3
-3.2
-3.1
-3
-2.9
-2.8
-2.7
-2.6
-2.5
-2.4
-2.3
-2.2
-2.1
-2
-1.9
-1.8
-1.7
-1.6
-1.5
-1.4
-1.3
-1.2
-1.1
-1
-0.9

-0.8
-0.7
-0.6
-0.5
-0.4
-0.3
-0.2
-0.1
-1.9E-14
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1
1.1
1.2
1.3
1.4
1.5
1.6
1.7
1.8
1.9
2.1
2.2
2.3
2.4
2.5
2.6
2.7
2.8
2.9
3.1
3.2
3.3
3.4
3.5
3.6
3.7
3.8
3.9
4
4.1
4.2
4.3

4.4
4.5
4.6
4.7
4.8
4.9
5
5.1
5.2
5.3
5.4
5.5
5.6
5.7
5.8
5.9
6
6.1
6.2
6.3
6.4
6.5
6.6
6.7
6.8
6.9
7
7.1
7.2
7.3
7.4
7.5
7.6
7.7
7.8
7.9
8
8.1
8.2
8.3
8.4
8.5
8.6
8.7
8.8
8.9
9
9.1
9.2
9.3

9.4
9.5
9.6
9.7
9.8
9.9
10

Operace s maticemi

$A=$

x_1	x_2	x_3
1	2	3
4	5	6
7	8	1

$A^{-1} =$

$b=$

5
4
2

$x = A^{-1} b =$

Zkouška:
$Ax=$

$A^T =$

$(A^{-1})^{-1} =$

$A*A^{-1} =$

$A^{-1}*A =$

x_1
x_2
x_3

Operace s maticemi 2

$A=$

x_1	x_2	x_3	x_4
5	8	1	2
2	5	4	3
6	8	1	4
4	9	7	2

A^{-1} =

$b=$

1
8
7
3

x = $A^{-1} b$ =

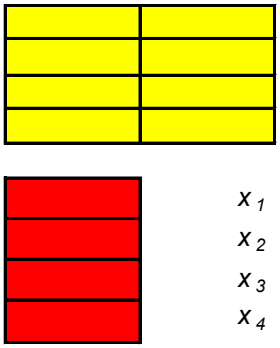
Zkouška:
$Ax=$

A^T =

$(A^{-1})^{-1}$ =

$A*A^{-1}$ =

$A^{-1}*A$ =


x_1
x_2
x_3
x_4