1)

		reszta
98273/13 = 7559		6
7559/13 = 581		6
581/13 = 44		9
44/13 = 3		5
3/13 = 0		3

$(98273)_{10} = (35966)_{13}$

2)

$(\neg A + C)(AB + \neg A\neg B + AC) = \cancel{\neg AAB + \neg A\neg A\neg B + \neg AAC + ABC + \neg A\neg BC + AC = 0B + \neg AB + AC + ABC +}$

$\cancel{= (\neg A + C)(AB + \neg A + \neg B + AC) = 0B + \neg A + \neg A\neg B + 0C + ABC + \neg AC + \neg BC + AC} = \underbrace{\neg A + \neg A\neg B}_{\neg A} + \underbrace{ABC + \neg BC}_{C(AB+\neg B)} + AC =$

$\cancel{= \neg A(\neg A + \neg A}$

$\cancel{(\bar{A} + C)(AB + \bar{A}B + AC) =}$

$\cancel{= 0B + \neg A +}$

$= 0B + \neg A\neg B + 0C + ABC + \neg A\neg BC + AC = \underbrace{(\neg A\neg B) + (\neg A\neg B)C}_{\neg A\neg B} + \underbrace{(AC) + (AC)B}_{AC} = \neg A\neg B + AC =$

$= \underline{\underline{\neg(AB) + AC}}$

3)

AB \ CD	00	01	10	11
00	0	1	0	1
01	0	0	1	1
10	1	0	1	0
11	1	1	0	0

CD \ AB	00	01	11	10
00	0	0	1	1
01	1	0	1	0
11	1	1	0	0
10	0	1	0	1

$\underbrace{\neg A\neg BD + \neg ABC + AB\neg C + A\neg B\neg D}$

ABC

A	B	C	D	F
0	0	0	0	0
0	0	0	1	1
0	0	1	0	0
0	0	1	1	1
0	1	0	0	0
0	1	0	1	0
0	1	1	0	1
0	1	1	1	1
1	0	0	0	1
1	0	0	1	0
1	0	1	0	1
1	0	1	1	0
1	1	0	0	1
1	1	0	1	1
1	1	1	0	0
1	1	1	1	0