

vln. délka (nm)	A	derivace	mkp(5)
200	1.9937		
201	1.9946		
202	1.9931		
203	1.9923		
204	1.9912		
205	1.9918		
206	1.9881		
207	1.9881		
208	1.9838		
209	1.9831		
210	1.9782		
211	1.9749		
212	1.9714		
213	1.9675		
214	1.9644		
215	1.9600		
216	1.9562		
217	1.9492		
218	1.9459		
219	1.9392		
220	1.9343		
221	1.9282		
222	1.9207		
223	1.9140		
224	1.9069		
225	1.9007		
226	1.8911		
227	1.8853		
228	1.8752		
229	1.8679		
230	1.8593		
231	1.8504		
232	1.8404		
233	1.8310		
234	1.8225		
235	1.8137		
236	1.8016		
237	1.7914		
238	1.7819		
239	1.7722		
240	1.7613		
241	1.7502		
242	1.7389		
243	1.7274		
244	1.7157		
245	1.7018		
246	1.6908		
247	1.6785		
248	1.6661		

249	1.6525
250	1.6418
251	1.6269
252	1.6159
253	1.6017
254	1.5873
255	1.5739
256	1.5623
257	1.5475
258	1.5337
259	1.5208
260	1.5047
261	1.4915
262	1.4783
263	1.4629
264	1.4485
265	1.4329
266	1.4193
267	1.4037
268	1.3909
269	1.3751
270	1.3603
271	1.3444
272	1.3314
273	1.3144
274	1.3014
275	1.2844
276	1.2703
277	1.2552
278	1.2401
279	1.2260
280	1.2089
281	1.1957
282	1.1796
283	1.1655
284	1.1504
285	1.1354
286	1.1183
287	1.1043
288	1.0903
289	1.0733
290	1.0604
291	1.0436
292	1.0298
293	1.0160
294	1.0003
295	0.9846
296	0.9701
297	0.9556
298	0.9421

299	0.9278
300	0.9145
301	0.8993
302	0.8852
303	0.8702
304	0.8573
305	0.8426
306	0.8309
307	0.8153
308	0.8028
309	0.7885
310	0.7763
311	0.7632
312	0.7513
313	0.7375
314	0.7258
315	0.7123
316	0.7000
317	0.6868
318	0.6768
319	0.6640
320	0.6534
321	0.6400
322	0.6288
323	0.6178
324	0.6090
325	0.5975
326	0.5882
327	0.5761
328	0.5664
329	0.5569
330	0.5477
331	0.5399
332	0.5314
333	0.5222
334	0.5153
335	0.5079
336	0.5019
337	0.4932
338	0.4890
339	0.4833
340	0.4760
341	0.4732
342	0.4679
343	0.4642
344	0.4620
345	0.4583
346	0.4563
347	0.4539
348	0.4551

349	0.4550
350	0.4555
351	0.4557
352	0.4586
353	0.4592
354	0.4636
355	0.4686
356	0.4734
357	0.4780
358	0.4833
359	0.4914
360	0.4992
361	0.5067
362	0.5180
363	0.5281
364	0.5368
365	0.5482
366	0.5603
367	0.5751
368	0.5865
369	0.6015
370	0.6170
371	0.6320
372	0.6465
373	0.6625
374	0.6778
375	0.6965
376	0.7124
377	0.7296
378	0.7459
379	0.7633
380	0.7808
381	0.8003
382	0.8166
383	0.8329
384	0.8499
385	0.8667
386	0.8841
387	0.8992
388	0.9148
389	0.9319
390	0.9444
391	0.9604
392	0.9737
393	0.9853
394	0.9972
395	1.0083
396	1.0186
397	1.0291
398	1.0367

399	1.0445
400	1.0525
401	1.0585
402	1.0637
403	1.0670
404	1.0694
405	1.0740
406	1.0757
407	1.0746
408	1.0748
409	1.0762
410	1.0738
411	1.0718
412	1.0691
413	1.0657
414	1.0609
415	1.0584
416	1.0525
417	1.0481
418	1.0414
419	1.0352
420	1.0287
421	1.0230
422	1.0150
423	1.0078
424	0.9994
425	0.9929
426	0.9852
427	0.9785
428	0.9687
429	0.9629
430	0.9540
431	0.9461
432	0.9382
433	0.9314
434	0.9235
435	0.9146
436	0.9058
437	0.8989
438	0.8901
439	0.8822
440	0.8764
441	0.8675
442	0.8605
443	0.8505
444	0.8424
445	0.8342
446	0.8260
447	0.8175
448	0.8090

449	0.8023
450	0.7934
451	0.7834
452	0.7751
453	0.7636
454	0.7540
455	0.7450
456	0.7349
457	0.7235
458	0.7128
459	0.7030
460	0.6908
461	0.6804
462	0.6698
463	0.6580
464	0.6459
465	0.6326
466	0.6191
467	0.6075
468	0.5956
469	0.5827
470	0.5685
471	0.5543
472	0.5420
473	0.5286
474	0.5161
475	0.5017
476	0.4882
477	0.4738
478	0.4604
479	0.4490
480	0.4338
481	0.4207
482	0.4097
483	0.3950
484	0.3833
485	0.3700
486	0.3578
487	0.3469
488	0.3342
489	0.3239
490	0.3128
491	0.3031
492	0.2917
493	0.2807
494	0.2710
495	0.2617
496	0.2537
497	0.2461
498	0.2360

499	0.2292
500	0.2208
501	0.2148
502	0.2083
503	0.2021
504	0.1963
505	0.1910
506	0.1870
507	0.1804
508	0.1783
509	0.1725
510	0.1691
511	0.1660
512	0.1654
513	0.1631
514	0.1601
515	0.1575
516	0.1572
517	0.1553
518	0.1567
519	0.1543
520	0.1563
521	0.1546
522	0.1561
523	0.1579
524	0.1590
525	0.1603
526	0.1618
527	0.1636
528	0.1635
529	0.1667
530	0.1701
531	0.1727
532	0.1755
533	0.1774
534	0.1805
535	0.1837
536	0.1871
537	0.1906
538	0.1932
539	0.1970
540	0.2008
541	0.2048
542	0.2108
543	0.2150
544	0.2192
545	0.2225
546	0.2278
547	0.2302
548	0.2367

549	0.2391
550	0.2447
551	0.2492
552	0.2548
553	0.2594
554	0.2640
555	0.2666
556	0.2713
557	0.2779
558	0.2825
559	0.2870
560	0.2906
561	0.2941
562	0.2986
563	0.3040
564	0.3094
565	0.3137
566	0.3170
567	0.3212
568	0.3264
569	0.3285
570	0.3325
571	0.3364
572	0.3403
573	0.3450
574	0.3487
575	0.3532
576	0.3567
577	0.3590
578	0.3612
579	0.3654
580	0.3684
581	0.3702
582	0.3750
583	0.3756
584	0.3801
585	0.3824
586	0.3826
587	0.3867
588	0.3886
589	0.3884
590	0.3901
591	0.3916
592	0.3949
593	0.3941
594	0.3971
595	0.3970
596	0.3967
597	0.3982
598	0.3986

599	0.3979
600	0.4000
601	0.3989
602	0.3976
603	0.3972
604	0.3987
605	0.3970
606	0.3971
607	0.3951
608	0.3949
609	0.3915
610	0.3910
611	0.3894
612	0.3876
613	0.3847
614	0.3826
615	0.3804
616	0.3800
617	0.3765
618	0.3739
619	0.3722
620	0.3683
621	0.3653
622	0.3631
623	0.3589
624	0.3565
625	0.3511
626	0.3485
627	0.3448
628	0.3400
629	0.3372
630	0.3342
631	0.3292
632	0.3261
633	0.3199
634	0.3156
635	0.3133
636	0.3089
637	0.3024
638	0.2979
639	0.2943
640	0.2907
641	0.2860
642	0.2793
643	0.2746
644	0.2709
645	0.2671
646	0.2623
647	0.2555
648	0.2506

649	0.2458
650	0.2430
651	0.2361
652	0.2323
653	0.2285
654	0.2227
655	0.2179
656	0.2131
657	0.2073
658	0.2026
659	0.1989
660	0.1942
661	0.1895
662	0.1859
663	0.1804
664	0.1748
665	0.1714
666	0.1659
667	0.1626
668	0.1582
669	0.1539
670	0.1507
671	0.1456
672	0.1405
673	0.1384
674	0.1344
675	0.1285
676	0.1257
677	0.1219
678	0.1192
679	0.1145
680	0.1119
681	0.1074
682	0.1050
683	0.1006
684	0.0963
685	0.0950
686	0.0899
687	0.0868
688	0.0858
689	0.0808
690	0.0780
691	0.0761
692	0.0744
693	0.0707
694	0.0691
695	0.0666
696	0.0642
697	0.0608
698	0.0584

699	0.0572
700	0.0540
701	0.0529
702	0.0488
703	0.0488
704	0.0459
705	0.0440
706	0.0432
707	0.0414
708	0.0377
709	0.0371
710	0.0345
711	0.0339
712	0.0335
713	0.0320
714	0.0287
715	0.0273
716	0.0270
717	0.0268
718	0.0256
719	0.0245
720	0.0224
721	0.0223
722	0.0193
723	0.0204
724	0.0194
725	0.0165
726	0.0177
727	0.0148
728	0.0161
729	0.0133
730	0.0146
731	0.0119
732	0.0122
733	0.0126
734	0.0100
735	0.0094
736	0.0089
737	0.0093
738	0.0078
739	0.0084
740	0.0089
741	0.0065
742	0.0061
743	0.0067
744	0.0063
745	0.0070
746	0.0056
747	0.0053
748	0.0040

749	0.0047
750	0.0054
751	0.0042
752	0.0039
753	0.0027
754	0.0035
755	0.0033
756	0.0021
757	0.0029
758	0.0037
759	0.0025
760	0.0024
761	0.0022
762	0.0031
763	0.0020
764	0.0018
765	0.0017
766	0.0016
767	0.0025
768	0.0004
769	0.0013
770	0.0012
771	0.0022
772	0.0011
773	0.0010
774	0.0009
775	-0.0001
776	0.0018
777	-0.0002
778	0.0017
779	0.0017
780	-0.0004
781	-0.0004
782	0.0015
783	0.0005
784	0.0005
785	0.0004
786	0.0004
787	0.0014
788	-0.0007
789	0.0003
790	-0.0007
791	0.0003
792	-0.0007
793	0.0002
794	0.0002
795	0.0002
796	0.0002
797	0.0012
798	0.0002

799	-0.0009
800	0.0001
801	-0.0009
802	0.0001
803	-0.0009
804	0.0011
805	-0.0009
806	0.0001
807	0.0001
808	0.0001
809	-0.0009
810	-0.0009
811	-0.0009
812	0.0010
813	0.0010
814	-0.0010
815	-0.0010
816	-0.0010
817	0.0010
818	0.0000
819	-0.0010
820	0.0000
821	0.0010
822	-0.0010
823	-0.0010
824	0.0010
825	0.0000
826	0.0010
827	-0.0010
828	-0.0010
829	-0.0010
830	-0.0010
831	-0.0010
832	0.0010
833	0.0000
834	0.0010
835	0.0000
836	-0.0010
837	-0.0010
838	-0.0010
839	0.0010
840	-0.0010
841	0.0010
842	0.0000
843	-0.0010
844	0.0000
845	-0.0010
846	0.0010
847	-0.0010
848	-0.0010

849	0.0010
850	-0.0010
851	-0.0010
852	0.0010
853	0.0010
854	-0.0010
855	0.0010
856	-0.0010
857	0.0010
858	0.0010
859	0.0000
860	0.0010
861	0.0000
862	-0.0010
863	0.0000
864	0.0010
865	-0.0010
866	0.0010
867	0.0000
868	0.0010
869	-0.0010
870	0.0010
871	-0.0010
872	-0.0010
873	0.0000
874	0.0000
875	0.0010
876	0.0010
877	-0.0010
878	0.0000
879	-0.0010
880	0.0010
881	0.0000
882	0.0010
883	-0.0010
884	-0.0010
885	0.0000
886	-0.0010
887	-0.0010
888	0.0000
889	0.0010
890	-0.0010
891	0.0000
892	-0.0010
893	-0.0010
894	-0.0010
895	0.0010
896	0.0000
897	0.0000
898	0.0010

vln. delka (nm)	max400	max200	max600	max450	suma	derivace
200	2.02091E-16	0.039894	1.01045E-16	1.10693E-17	1.993711	
201	2.78082E-16	0.039891	1.18554E-16	1.46055E-17	1.995556	0.001844169
202	3.82037E-16	0.039882	1.39041E-16	1.92499E-17	1.993088	-0.00246742
203	5.24013E-16	0.039866	1.63003E-16	2.53431E-17	1.992309	-0.00077879
204	7.17604E-16	0.039844	1.91018E-16	3.33279E-17	1.99222	-8.9793E-05
205	9.81142E-16	0.039816	2.23759E-16	4.37798E-17	1.989819	-0.00240029
206	1.33932E-15	0.039782	2.62007E-16	5.74457E-17	1.990109	0.000289875
207	1.82533E-15	0.039742	3.06669E-16	7.52936E-17	1.98609	-0.00401916
208	2.48373E-15	0.039695	3.58802E-16	9.85772E-17	1.983763	-0.00232726
209	3.37421E-15	0.039643	4.19629E-16	1.28918E-16	1.983128	-0.00063426
210	4.57663E-15	0.039584	4.90571E-16	1.68409E-16	1.980188	-0.00294004
211	6.1976E-15	0.039519	5.73278E-16	2.19754E-16	1.974944	-0.00524444
212	8.37928E-15	0.039448	6.6966E-16	2.86434E-16	1.973397	-0.00154734
213	1.13108E-14	0.039371	7.81934E-16	3.72932E-16	1.967548	-0.00584858
214	1.52436E-14	0.039288	9.12666E-16	4.85012E-16	1.9644	-0.00314803
215	2.0511E-14	0.039199	1.06483E-15	6.30076E-16	1.959954	-0.00444556
216	2.75544E-14	0.039104	1.24187E-15	8.17618E-16	1.956213	-0.00374102
217	3.69573E-14	0.039004	1.44776E-15	1.0598E-15	1.949179	-0.00703429
218	4.94896E-14	0.038897	1.68711E-15	1.3722E-15	1.945854	-0.00332524
219	6.61657E-14	0.038785	1.96524E-15	1.77472E-15	1.93924	-0.00661373
220	8.83196E-14	0.038667	2.28831E-15	2.29275E-15	1.933341	-0.00589963
221	1.17703E-13	0.038543	2.66343E-15	2.9587E-15	1.928158	-0.00518282
222	1.56611E-13	0.038414	3.0988E-15	3.81385E-15	1.919695	-0.00846318
223	2.08047E-13	0.038279	3.60389E-15	4.91071E-15	1.914954	-0.00474059
224	2.75934E-13	0.038139	4.18964E-15	6.31599E-15	1.906939	-0.00801491
225	3.65389E-13	0.037993	4.86864E-15	8.1144E-15	1.899653	-0.00728605
226	4.8307E-13	0.037842	5.65542E-15	1.04133E-14	1.893099	-0.00655387
227	6.37632E-13	0.037686	6.56672E-15	1.33487E-14	1.884281	-0.00881828
228	8.40303E-13	0.037524	7.62182E-15	1.70925E-14	1.877202	-0.00707915
229	1.10562E-12	0.037357	8.8429E-15	2.1862E-14	1.866865	-0.01033639
230	1.45238E-12	0.037186	1.02555E-14	2.79314E-14	1.858275	-0.00858988
231	1.90486E-12	0.037009	1.1889E-14	3.56461E-14	1.850436	-0.00783953
232	2.4943E-12	0.036827	1.37772E-14	4.54412E-14	1.842351	-0.00808524
233	3.26091E-12	0.03664	1.59589E-14	5.78634E-14	1.831024	-0.01132691
234	4.25633E-12	0.036449	1.84786E-14	7.35997E-14	1.822459	-0.00856445
235	5.54672E-12	0.036253	2.13877E-14	9.35115E-14	1.812662	-0.00979776
236	7.21676E-12	0.036053	2.47448E-14	1.18679E-13	1.801635	-0.01102677
237	9.37463E-12	0.035848	2.86174E-14	1.50451E-13	1.793383	-0.00825139
238	1.21582E-11	0.035638	3.30828E-14	1.90519E-13	1.781912	-0.01147154
239	1.57432E-11	0.035424	3.82298E-14	2.40989E-13	1.770225	-0.01168714
240	2.03526E-11	0.035207	4.41598E-14	3.04491E-13	1.760327	-0.00989811
241	2.62695E-11	0.034984	5.09893E-14	3.84298E-13	1.749222	-0.01110439
242	3.38523E-11	0.034758	5.88514E-14	4.84484E-13	1.737916	-0.01130592
243	4.35542E-11	0.034528	6.78986E-14	6.10111E-13	1.727414	-0.01050262
244	5.59471E-11	0.034294	7.83053E-14	7.67459E-13	1.713719	-0.01369443
245	7.17514E-11	0.034057	9.02709E-14	9.64315E-13	1.701838	-0.0118813
246	9.1873E-11	0.033815	1.04023E-13	1.21032E-12	1.691775	-0.01006318
247	1.17449E-10	0.033571	1.19823E-13	1.5174E-12	1.678535	-0.01324001
248	1.49906E-10	0.033322	1.37967E-13	1.90027E-12	1.667123	-0.01141176

249	1.91025E-10	0.033071	1.58795E-13	2.37711E-12	1.654545	-0.01257837
250	2.43035E-10	0.032816	1.82694E-13	2.9703E-12	1.640805	-0.0137398
251	3.08711E-10	0.032558	2.10107E-13	3.7074E-12	1.628909	-0.01189603
252	3.91508E-10	0.032297	2.41535E-13	4.62227E-12	1.615862	-0.01304701
253	4.95718E-10	0.032033	2.77554E-13	5.7565E-12	1.600669	-0.01519272
254	6.26662E-10	0.031767	3.18816E-13	7.1611E-12	1.588336	-0.01233314
255	7.90928E-10	0.031497	3.66066E-13	8.89852E-12	1.574868	-0.01346824
256	9.96657E-10	0.031225	4.20151E-13	1.10452E-11	1.56127	-0.013598
257	1.25389E-09	0.030951	4.82034E-13	1.36945E-11	1.547547	-0.01372241
258	1.57499E-09	0.030674	5.5281E-13	1.69605E-11	1.533706	-0.01384146
259	1.97516E-09	0.030395	6.33725E-13	2.0982E-11	1.518751	-0.01495513
260	2.47305E-09	0.030114	7.26192E-13	2.59282E-11	1.504687	-0.01406343
261	3.09148E-09	0.02983	8.31819E-13	3.20048E-11	1.492521	-0.01216635
262	3.8584E-09	0.029545	9.52428E-13	3.94617E-11	1.478257	-0.0142639
263	4.80786E-09	0.029258	1.09009E-12	4.86019E-11	1.463901	-0.01435608
264	5.98138E-09	0.028969	1.24715E-12	5.97928E-11	1.447458	-0.01644289
265	7.42945E-09	0.028679	1.42627E-12	7.34788E-11	1.434934	-0.01252435
266	9.21333E-09	0.028387	1.63046E-12	9.0197E-11	1.418333	-0.01660048
267	1.14073E-08	0.028093	1.86313E-12	1.10596E-10	1.403662	-0.01467129
268	1.41011E-08	0.027798	2.12816E-12	1.35458E-10	1.390925	-0.0127368
269	1.74032E-08	0.027503	2.42992E-12	1.65725E-10	1.374128	-0.01679704
270	2.14441E-08	0.027205	2.77336E-12	2.02529E-10	1.359276	-0.01485203
271	2.63812E-08	0.026907	3.16407E-12	2.47233E-10	1.345374	-0.0139018
272	3.2403E-08	0.026609	3.60838E-12	3.01468E-10	1.330428	-0.01494639
273	3.97358E-08	0.026309	4.11344E-12	3.67192E-10	1.316442	-0.01398582
274	4.865E-08	0.026008	4.68731E-12	4.46749E-10	1.300422	-0.01602014
275	5.94688E-08	0.025707	5.33911E-12	5.42939E-10	1.286373	-0.01404938
276	7.25772E-08	0.025406	6.07912E-12	6.59107E-10	1.271299	-0.01507359
277	8.84336E-08	0.025104	6.91892E-12	7.99241E-10	1.256206	-0.01509281
278	1.07582E-07	0.024802	7.87159E-12	9.68094E-10	1.240099	-0.01610708
279	1.30667E-07	0.0245	8.95184E-12	1.17132E-09	1.224983	-0.01511646
280	1.58452E-07	0.024197	1.01763E-11	1.41563E-09	1.210862	-0.01412098
281	1.91838E-07	0.023895	1.15636E-11	1.709E-09	1.194741	-0.0161207
282	2.31887E-07	0.023592	1.31347E-11	2.06087E-09	1.178625	-0.01611567
283	2.79849E-07	0.02329	1.49134E-11	2.48244E-09	1.165519	-0.01310595
284	3.37192E-07	0.022988	1.69261E-11	2.98691E-09	1.149428	-0.01609158
285	4.05634E-07	0.022687	1.92029E-11	3.58992E-09	1.134355	-0.01507262
286	4.87189E-07	0.022386	2.17771E-11	4.30987E-09	1.120306	-0.01404911
287	5.84205E-07	0.022085	2.46866E-11	5.16846E-09	1.103285	-0.01702112
288	6.9942E-07	0.021785	2.79736E-11	6.19121E-09	1.088296	-0.01498869
289	8.36019E-07	0.021486	3.16855E-11	7.4081E-09	1.075344	-0.01295188
290	9.97699E-07	0.021188	3.58757E-11	8.85434E-09	1.059434	-0.01591073
291	1.18874E-06	0.02089	4.06037E-11	1.05712E-08	1.044568	-0.01486528
292	1.4141E-06	0.020594	4.59365E-11	1.26069E-08	1.028753	-0.01581559
293	1.6795E-06	0.020298	5.19488E-11	1.50179E-08	1.014991	-0.01376169
294	1.99152E-06	0.020004	5.87247E-11	1.78701E-08	0.999287	-0.01570362
295	2.35772E-06	0.019711	6.63577E-11	2.12405E-08	0.985646	-0.01364141
296	2.78681E-06	0.019419	7.49529E-11	2.52184E-08	0.971071	-0.01457508
297	3.28871E-06	0.019128	8.46275E-11	2.99081E-08	0.956566	-0.01450466
298	3.87481E-06	0.018839	9.55127E-11	3.54305E-08	0.942136	-0.01443016

299	4.55806E-06	0.018551	1.07755E-10	4.19261E-08	0.926784	-0.01535158
300	5.35321E-06	0.018265	1.21518E-10	4.95573E-08	0.914516	-0.01226891
301	6.27703E-06	0.01798	1.36983E-10	5.85125E-08	0.899333	-0.01518216
302	7.3485E-06	0.017697	1.54356E-10	6.90093E-08	0.886242	-0.01309128
303	8.58912E-06	0.017416	1.73862E-10	8.12987E-08	0.870246	-0.01599624
304	1.00231E-05	0.017137	1.95754E-10	9.56703E-08	0.856349	-0.01389699
305	1.16779E-05	0.016859	2.20315E-10	1.12457E-07	0.842555	-0.01379346
306	1.3584E-05	0.016584	2.47859E-10	1.32043E-07	0.83087	-0.01168557
307	1.57761E-05	0.01631	2.78734E-10	1.54868E-07	0.817297	-0.01357322
308	1.82926E-05	0.016038	3.13331E-10	1.81437E-07	0.80384	-0.0134563
309	2.11766E-05	0.015769	3.5208E-10	2.12328E-07	0.789506	-0.01433466
310	2.44761E-05	0.015501	3.95464E-10	2.48202E-07	0.775298	-0.01420814
311	2.82444E-05	0.015236	4.44016E-10	2.89814E-07	0.763221	-0.01207656
312	3.25408E-05	0.014973	4.98329E-10	3.38028E-07	0.751281	-0.01193971
313	3.74309E-05	0.014712	5.59062E-10	3.93825E-07	0.738484	-0.01279736
314	4.29869E-05	0.014453	6.26945E-10	4.58323E-07	0.724835	-0.01364925
315	4.92888E-05	0.014197	7.02791E-10	5.32791E-07	0.71234	-0.0124951
316	5.64241E-05	0.013943	7.87497E-10	6.18671E-07	0.699005	-0.01333458
317	6.44891E-05	0.013692	8.8206E-10	7.17597E-07	0.687838	-0.01116735
318	7.3589E-05	0.013442	9.87582E-10	8.31416E-07	0.675845	-0.01199305
319	8.38388E-05	0.013196	1.10529E-09	9.62218E-07	0.663033	-0.01281125
320	9.53635E-05	0.012952	1.23652E-09	1.11236E-06	0.652412	-0.01062153
321	0.000108299	0.01271	1.38279E-09	1.28451E-06	0.639988	-0.01242341
322	0.000122793	0.012471	1.54574E-09	1.48164E-06	0.630772	-0.0092164
323	0.000139003	0.012235	1.7272E-09	1.70714E-06	0.617772	-0.01299998
324	0.000157102	0.012001	1.9292E-09	1.96477E-06	0.608998	-0.00877359
325	0.000177274	0.01177	2.15395E-09	2.25877E-06	0.596462	-0.01253665
326	0.000199716	0.011541	2.40393E-09	2.59387E-06	0.586173	-0.01028855
327	0.000224639	0.011315	2.68184E-09	2.97539E-06	0.578145	-0.00802866
328	0.000252269	0.011092	2.99069E-09	3.40923E-06	0.567388	-0.01075635
329	0.000282844	0.010872	3.33377E-09	3.90199E-06	0.558917	-0.00847096
330	0.000316618	0.010654	3.71472E-09	4.46101E-06	0.549745	-0.0091718
331	0.000353858	0.010439	4.13755E-09	5.09445E-06	0.540887	-0.00885822
332	0.000394846	0.010226	4.60667E-09	5.81139E-06	0.530358	-0.01052953
333	0.000439877	0.010017	5.12692E-09	6.62185E-06	0.524173	-0.00618507
334	0.000489261	0.00981	5.70364E-09	7.53696E-06	0.514348	-0.00982419
335	0.000543319	0.009606	6.3427E-09	8.56901E-06	0.507902	-0.00644625
336	0.000602385	0.009405	7.05054E-09	9.73156E-06	0.499852	-0.00805066
337	0.000666804	0.009206	7.83424E-09	1.10396E-05	0.493215	-0.00663685
338	0.000736932	0.009011	8.70158E-09	1.25095E-05	0.48901	-0.00420429
339	0.000813134	0.008818	9.66107E-09	1.41593E-05	0.481258	-0.00775255
340	0.000895781	0.008628	1.07221E-08	1.6009E-05	0.476977	-0.00428122
341	0.000985251	0.00844	1.18948E-08	1.80802E-05	0.471187	-0.00578999
342	0.001081924	0.008256	1.31906E-08	2.03967E-05	0.467908	-0.00327865
343	0.001186183	0.008074	1.46217E-08	2.29845E-05	0.463161	-0.00474706
344	0.001298411	0.007895	1.62015E-08	2.58718E-05	0.461966	-0.00119522
345	0.001418984	0.007719	1.79449E-08	2.90894E-05	0.457342	-0.00462325
346	0.001548274	0.007545	1.98679E-08	3.26709E-05	0.456311	-0.00103137
347	0.001686644	0.007375	2.19882E-08	3.66527E-05	0.454891	-0.00142
348	0.001834443	0.007206	2.4325E-08	4.1074E-05	0.453101	-0.00178966

349	0.001992004	0.007041	2.68994E-08	4.59775E-05	0.45396	0.000858928
350	0.002159639	0.006879	2.97344E-08	5.14093E-05	0.454485	0.000524897
351	0.002337638	0.006719	3.2855E-08	5.7419E-05	0.454692	0.000207187
352	0.002526262	0.006562	3.62886E-08	6.40599E-05	0.456597	0.001904557
353	0.002725743	0.006407	4.0065E-08	7.13896E-05	0.459213	0.002615576
354	0.002936273	0.006255	4.42168E-08	7.94696E-05	0.463551	0.00433862
355	0.003158006	0.006106	4.87792E-08	8.83659E-05	0.466623	0.00307187
356	0.003391054	0.005959	5.37909E-08	9.81489E-05	0.472436	0.005813314
357	0.003635479	0.005816	5.92938E-08	0.000108894	0.477997	0.005560745
358	0.003891291	0.005674	6.53335E-08	0.000120681	0.485309	0.007311773
359	0.004158444	0.005535	7.19596E-08	0.000133596	0.490373	0.005063823
360	0.004436833	0.005399	7.9226E-08	0.000147728	0.500187	0.009814148
361	0.004726292	0.005265	8.71913E-08	0.000163174	0.508747	0.008559844
362	0.005026585	0.005134	9.5919E-08	0.000180035	0.517045	0.008297855
363	0.005337412	0.005005	1.05478E-07	0.000198418	0.52607	0.009024996
364	0.005658399	0.004879	1.15944E-07	0.000218434	0.538808	0.012737969
365	0.005989099	0.004755	1.27397E-07	0.000240203	0.548241	0.009433383
366	0.006328992	0.004634	1.39925E-07	0.000263848	0.560349	0.012107778
367	0.006677482	0.004515	1.53623E-07	0.000289499	0.573106	0.012757647
368	0.007033897	0.004398	1.68596E-07	0.000317291	0.588486	0.015379468
369	0.007397491	0.004284	1.84953E-07	0.000347364	0.602456	0.013969726
370	0.007767442	0.004172	2.02817E-07	0.000379866	0.61498	0.012524945
371	0.008142856	0.004062	2.22317E-07	0.000414948	0.632022	0.017041722
372	0.008522766	0.003955	2.43594E-07	0.000452766	0.646539	0.014516754
373	0.00890614	0.00385	2.66801E-07	0.000493482	0.661486	0.01494687
374	0.00929188	0.003747	2.92102E-07	0.000537262	0.678815	0.017329065
375	0.009678829	0.003646	3.19675E-07	0.000584277	0.694475	0.015660535
376	0.010065774	0.003547	3.4971E-07	0.0006347	0.712414	0.017938698
377	0.010451452	0.003451	3.82414E-07	0.000688709	0.728575	0.016161236
378	0.010834559	0.003357	4.1801E-07	0.000746484	0.747901	0.019326115
379	0.011213752	0.003264	4.56735E-07	0.000808208	0.765333	0.017431616
380	0.011587662	0.003174	4.98849E-07	0.000874063	0.781809	0.016476357
381	0.011954896	0.003086	5.44629E-07	0.000944235	0.800269	0.018459316
382	0.01231405	0.002999	5.94371E-07	0.001018907	0.815649	0.01537985
383	0.012663716	0.002915	6.48398E-07	0.001098264	0.833886	0.018237712
384	0.013002491	0.002833	7.07052E-07	0.001182486	0.851919	0.018033058
385	0.013328984	0.002752	7.70704E-07	0.001271754	0.866686	0.01476646
386	0.013641832	0.002674	8.3975E-07	0.001366242	0.884125	0.017438908
387	0.013939701	0.002597	9.14616E-07	0.00146612	0.899177	0.01505181
388	0.014221301	0.002522	9.95758E-07	0.001571552	0.914784	0.015606987
389	0.014485395	0.002449	1.08367E-06	0.001682696	0.93089	0.016106663
390	0.014730806	0.002377	1.17886E-06	0.001799699	0.944444	0.013553454
391	0.014956424	0.002307	1.28191E-06	0.0019227	0.960394	0.015950349
392	0.015161221	0.002239	1.3934E-06	0.002051827	0.972695	0.012300688
393	0.015344252	0.002173	1.51399E-06	0.002187194	0.986303	0.013608136
394	0.015504665	0.002108	1.64436E-06	0.002328903	0.997179	0.010876653
395	0.015641708	0.002045	1.78523E-06	0.002477039	1.00829	0.01111046
396	0.015754734	0.001984	1.9374E-06	0.002631672	1.019604	0.011314005
397	0.015843208	0.001924	2.10171E-06	0.002792853	1.028096	0.008491922
398	0.015906708	0.001865	2.27903E-06	0.002960615	1.037745	0.00964899

399	0.01594493	0.001808	2.47032E-06	0.003134969	1.044535	0.00679009
400	0.015957691	0.001753	2.6766E-06	0.003315905	1.052455	0.00792016
401	0.01594493	0.001699	2.89895E-06	0.003503388	1.058499	0.006044148
402	0.015906708	0.001646	3.13851E-06	0.003697361	1.063666	0.00516697
403	0.015843208	0.001595	3.39651E-06	0.003897741	1.06596	0.002293462
404	0.015754734	0.001545	3.67425E-06	0.004104417	1.069388	0.003428337
405	0.015641708	0.001496	3.97311E-06	0.004317253	1.071964	0.00257614
406	0.015504665	0.001449	4.29456E-06	0.004536083	1.075705	0.00374121
407	0.015344252	0.001403	4.64016E-06	0.004760712	1.074633	-0.00107236
408	0.015161221	0.001358	5.01157E-06	0.004990916	1.076772	0.002139226
409	0.014956424	0.001315	5.41054E-06	0.005226441	1.074152	-0.00262052
410	0.014730806	0.001272	5.83894E-06	0.005467002	1.074803	0.000651532
411	0.014485395	0.001231	6.29874E-06	0.005712286	1.070761	-0.00404182
412	0.014221301	0.001191	6.79202E-06	0.005961947	1.070063	-0.0006982
413	0.013939701	0.001152	7.32102E-06	0.00621561	1.065748	-0.00431561
414	0.013641832	0.001115	7.88805E-06	0.006472868	1.062855	-0.00289248
415	0.013328984	0.001078	8.49561E-06	0.00673329	1.056427	-0.00642767
416	0.013002491	0.001042	9.1463E-06	0.00699641	1.053507	-0.00292046
417	0.012663716	0.001007	9.84289E-06	0.007261739	1.048136	-0.00537054
418	0.01231405	0.000974	1.05883E-05	0.007528761	1.042358	-0.00577802
419	0.011954896	0.000941	1.13856E-05	0.007796933	1.036215	-0.00614343
420	0.011587662	0.000909	1.2238E-05	0.008065691	1.028747	-0.00746766
421	0.011213752	0.000879	1.3149E-05	0.008334447	1.022995	-0.00575196
422	0.010834559	0.000849	1.41222E-05	0.008602594	1.014997	-0.00799796
423	0.010451452	0.00082	1.51613E-05	0.008869508	1.00679	-0.00820756
424	0.010065774	0.000792	1.62704E-05	0.009134549	0.999407	-0.00738297
425	0.009678829	0.000764	1.74537E-05	0.009397063	0.99288	-0.00652662
426	0.00929188	0.000738	1.87154E-05	0.009656385	0.984239	-0.00864119
427	0.00890614	0.000712	2.00604E-05	0.009911845	0.97851	-0.00572951
428	0.008522766	0.000687	2.14935E-05	0.010162764	0.968715	-0.00979457
429	0.008142856	0.000663	2.30197E-05	0.010408464	0.961876	-0.00683945
430	0.007767442	0.00064	2.46444E-05	0.010648267	0.954008	-0.00786729
431	0.007397491	0.000617	2.63732E-05	0.010881497	0.946127	-0.00788127
432	0.007033897	0.000595	2.8212E-05	0.011107487	0.939242	-0.00688454
433	0.006677482	0.000574	3.0167E-05	0.011325579	0.931362	-0.00788023
434	0.006328992	0.000553	3.22445E-05	0.01153513	0.921491	-0.00987136
435	0.005989099	0.000534	3.44514E-05	0.011735511	0.91363	-0.00786084
436	0.005658399	0.000514	3.67945E-05	0.011926114	0.905779	-0.00785146
437	0.005337412	0.000496	3.92813E-05	0.012106354	0.898933	-0.00684582
438	0.005026585	0.000478	4.19194E-05	0.012275671	0.890086	-0.00884631
439	0.004726292	0.00046	4.47168E-05	0.012433534	0.882231	-0.00785514
440	0.004436833	0.000443	4.76818E-05	0.012579441	0.875357	-0.00687426
441	0.004158444	0.000427	5.0823E-05	0.012712927	0.867452	-0.00790536
442	0.003891291	0.000411	5.41495E-05	0.012833562	0.860502	-0.00694988
443	0.003635479	0.000396	5.76707E-05	0.012940956	0.851493	-0.00900901
444	0.003391054	0.000381	6.13963E-05	0.013034756	0.843409	-0.00808363
445	0.003158006	0.000367	6.53364E-05	0.013114657	0.835235	-0.00817436
446	0.002936273	0.000353	6.95015E-05	0.013180395	0.827953	-0.00728155
447	0.002725743	0.00034	7.39027E-05	0.013231752	0.819548	-0.00840527
448	0.002526262	0.000327	7.85511E-05	0.013268558	0.809003	-0.01054533

449	0.002337638	0.000314	8.34585E-05	0.01329069	0.801301	-0.0077013
450	0.002159639	0.000302	8.8637E-05	0.013298076	0.791429	-0.00987248
451	0.001992004	0.000291	9.40992E-05	0.01329069	0.784371	-0.00705798
452	0.001834443	0.000279	9.9858E-05	0.013268558	0.775114	-0.00925667
453	0.001686644	0.000269	0.000105927	0.013231752	0.763647	-0.01146727
454	0.001548274	0.000258	0.00011232	0.013180395	0.753959	-0.00968829
455	0.001418984	0.000248	0.000119051	0.013114657	0.745041	-0.00891812
456	0.001298411	0.000238	0.000126135	0.013034756	0.733886	-0.01115501
457	0.001186183	0.000229	0.000133586	0.012940956	0.725488	-0.0083971
458	0.001081924	0.00022	0.000141422	0.012833562	0.712846	-0.01264247
459	0.000985251	0.000211	0.000149657	0.012712927	0.703957	-0.00888912
460	0.000895781	0.000203	0.000158309	0.012579441	0.690822	-0.01313502
461	0.000813134	0.000195	0.000167394	0.012433534	0.679444	-0.01137813
462	0.000736932	0.000187	0.000176929	0.012275671	0.668827	-0.01061641
463	0.000666804	0.000179	0.000186933	0.012106354	0.657979	-0.01084784
464	0.000602385	0.000172	0.000197423	0.011926114	0.645909	-0.01207047
465	0.000543319	0.000165	0.000208419	0.011735511	0.631627	-0.01428238
466	0.000489261	0.000159	0.000219939	0.01153513	0.619145	-0.01248176
467	0.000439877	0.000152	0.000232003	0.011325579	0.606478	-0.01266687
468	0.000394846	0.000146	0.000244631	0.011107487	0.594642	-0.01183611
469	0.000353858	0.00014	0.000257843	0.010881497	0.582654	-0.01198796
470	0.000316618	0.000134	0.000271659	0.010648267	0.569533	-0.01312106
471	0.000282844	0.000129	0.000286102	0.010408464	0.556299	-0.01323418
472	0.000252269	0.000123	0.000301192	0.010162764	0.540972	-0.01532625
473	0.000224639	0.000118	0.000316952	0.009911845	0.527576	-0.01339632
474	0.000199716	0.000113	0.000333402	0.009656385	0.514132	-0.01344363
475	0.000177274	0.000108	0.000350566	0.009397063	0.501665	-0.01246754
476	0.000157102	0.000104	0.000368466	0.009134549	0.488197	-0.01346761
477	0.000139003	9.94E-05	0.000387126	0.008869508	0.475754	-0.01244352
478	0.000122793	9.52E-05	0.000406567	0.008602594	0.460359	-0.01539513
479	0.000108299	9.12E-05	0.000426814	0.008334447	0.449036	-0.01132242
480	9.53635E-05	8.73E-05	0.000447891	0.008065691	0.433811	-0.01522554
481	8.38388E-05	8.35E-05	0.00046982	0.007796933	0.422706	-0.01110477
482	7.3589E-05	7.99E-05	0.000492625	0.007528761	0.409745	-0.01296053
483	6.44891E-05	7.65E-05	0.000516332	0.007261739	0.395952	-0.01379335
484	5.64241E-05	7.32E-05	0.000540962	0.00699641	0.382348	-0.01360389
485	4.92888E-05	7E-05	0.000566541	0.00673329	0.371955	-0.01039291
486	4.29869E-05	6.69E-05	0.000593092	0.006472868	0.359794	-0.01216126
487	3.74309E-05	6.4E-05	0.000620639	0.00621561	0.346884	-0.01290991
488	3.25408E-05	6.12E-05	0.000649205	0.005961947	0.336244	-0.01063986
489	2.82444E-05	5.85E-05	0.000678815	0.005712286	0.323892	-0.01235222
490	2.44761E-05	5.59E-05	0.000709492	0.005467002	0.313844	-0.01004813
491	2.11766E-05	5.34E-05	0.000741258	0.005226441	0.301115	-0.0127288
492	1.82926E-05	5.1E-05	0.000774137	0.004990916	0.29072	-0.01039545
493	1.57761E-05	4.88E-05	0.000808151	0.004760712	0.28167	-0.00904935
494	1.3584E-05	4.66E-05	0.000843322	0.004536083	0.272978	-0.00869178
495	1.16779E-05	4.45E-05	0.000879672	0.004317253	0.262654	-0.01032404
496	1.00231E-05	4.25E-05	0.000917222	0.004104417	0.252707	-0.00994741
497	8.58912E-06	4.06E-05	0.000955991	0.003897741	0.245144	-0.00756318
498	7.3485E-06	3.87E-05	0.000996002	0.003697361	0.235971	-0.00917261

499	6.27703E-06	3.69E-05	0.001037272	0.003503388	0.230194	-0.00577695
500	5.35321E-06	3.53E-05	0.001079819	0.003315905	0.222817	-0.00737743
501	4.55806E-06	3.36E-05	0.001123663	0.003134969	0.215842	-0.00697522
502	3.87481E-06	3.21E-05	0.001168819	0.002960615	0.20827	-0.00757146
503	3.28871E-06	3.06E-05	0.001215303	0.002792853	0.202103	-0.00616726
504	2.78681E-06	2.92E-05	0.001263131	0.002631672	0.196339	-0.00576367
505	2.35772E-06	2.78E-05	0.001312316	0.002477039	0.189978	-0.00636168
506	1.99152E-06	2.65E-05	0.001362871	0.002328903	0.186015	-0.00396225
507	1.6795E-06	2.53E-05	0.001414808	0.002187194	0.180449	-0.00556626
508	1.4141E-06	2.41E-05	0.001468136	0.002051827	0.177274	-0.00317455
509	1.18874E-06	2.3E-05	0.001522865	0.0019227	0.174487	-0.00278788
510	9.97699E-07	2.19E-05	0.001579003	0.001799699	0.16908	-0.00540696
511	8.36019E-07	2.09E-05	0.001636556	0.001682696	0.166047	-0.00303246
512	6.9942E-07	1.99E-05	0.001695527	0.001571552	0.163382	-0.00266496
513	5.84205E-07	1.89E-05	0.001755921	0.00146612	0.163077	-0.000305
514	4.87189E-07	1.8E-05	0.00181774	0.001366242	0.160124	-0.00295306
515	4.05634E-07	1.72E-05	0.001880982	0.001271754	0.159515	-0.00060956
516	3.37192E-07	1.63E-05	0.001945645	0.001182486	0.15824	-0.00127486
517	2.79849E-07	1.55E-05	0.002011727	0.001098264	0.15629	-0.00194929
518	2.31887E-07	1.48E-05	0.002079222	0.001018907	0.155657	-0.00063311
519	1.91838E-07	1.41E-05	0.002148122	0.000944235	0.154331	-0.00132653
520	1.58452E-07	1.34E-05	0.002218417	0.000874063	0.155301	0.000970256
521	1.30667E-07	1.27E-05	0.002290096	0.000808208	0.155558	0.000257129
522	1.07582E-07	1.21E-05	0.002363146	0.000746484	0.155092	-0.00046601
523	8.84336E-08	1.15E-05	0.002437551	0.000688709	0.157893	0.002800781
524	7.25772E-08	1.09E-05	0.002513293	0.0006347	0.15795	5.74786E-05
525	5.94688E-08	1.04E-05	0.002590352	0.000584277	0.158255	0.000304087
526	4.865E-08	9.89E-06	0.002668706	0.000537262	0.160795	0.002540639
527	3.97358E-08	9.39E-06	0.002748331	0.000493482	0.163562	0.002767191
528	3.2403E-08	8.93E-06	0.002829199	0.000452766	0.163546	-1.6176E-05
529	2.63812E-08	8.48E-06	0.002911283	0.000414948	0.167737	0.004190635
530	2.14441E-08	8.05E-06	0.002994549	0.000379866	0.168125	0.000387739
531	1.74032E-08	7.65E-06	0.003078966	0.000347364	0.1727	0.004575266
532	1.41011E-08	7.26E-06	0.003164496	0.000317291	0.173453	0.000753355
533	1.14073E-08	6.89E-06	0.003251101	0.000289499	0.176375	0.002922158
534	9.21333E-09	6.54E-06	0.003338741	0.000263848	0.180457	0.004081833
535	7.42945E-09	6.21E-06	0.003427372	0.000240203	0.18269	0.002232544
536	5.98138E-09	5.89E-06	0.003516949	0.000218434	0.188064	0.005374458
537	4.80786E-09	5.59E-06	0.003607423	0.000198418	0.191572	0.003507746
538	3.8584E-09	5.31E-06	0.003698746	0.000180035	0.195204	0.00363258
539	3.09148E-09	5.03E-06	0.003790863	0.000163174	0.197954	0.00274913
540	2.47305E-09	4.77E-06	0.003883721	0.000147728	0.200811	0.002857566
541	1.97516E-09	4.52E-06	0.003977262	0.000133596	0.206769	0.005958055
542	1.57499E-09	4.29E-06	0.004071428	0.000120681	0.20882	0.002050762
543	1.25389E-09	4.07E-06	0.004166156	0.000108894	0.212956	0.004135848
544	9.96657E-10	3.85E-06	0.004261383	9.81489E-05	0.217169	0.004213467
545	7.90928E-10	3.65E-06	0.004357044	8.83659E-05	0.221453	0.004283771
546	6.26662E-10	3.46E-06	0.00445307	7.94696E-05	0.2268	0.005346906
547	4.95718E-10	3.28E-06	0.004549393	7.13896E-05	0.232203	0.005403011
548	3.91508E-10	3.1E-06	0.00464594	6.40599E-05	0.236655	0.004452223

549	3.08711E-10	2.94E-06	0.004742639	5.7419E-05	0.24015	0.003494669
550	2.43035E-10	2.78E-06	0.004839414	5.14093E-05	0.24568	0.005530475
551	1.91025E-10	2.64E-06	0.00493619	4.59775E-05	0.25024	0.004559757
552	1.49906E-10	2.49E-06	0.005032887	4.1074E-05	0.254823	0.00458263
553	1.17449E-10	2.36E-06	0.005129426	3.66527E-05	0.257422	0.002599202
554	9.1873E-11	2.23E-06	0.005225726	3.26709E-05	0.263032	0.005609577
555	7.17514E-11	2.11E-06	0.005321705	2.90894E-05	0.266645	0.003613854
556	5.59471E-11	2E-06	0.005417279	2.58718E-05	0.272258	0.005612129
557	4.35542E-11	1.89E-06	0.005512365	2.29845E-05	0.276862	0.004604494
558	3.38523E-11	1.79E-06	0.005606876	2.03967E-05	0.281453	0.00459104
559	2.62695E-11	1.69E-06	0.005700727	1.80802E-05	0.287025	0.005571852
560	2.03526E-11	1.6E-06	0.005793831	1.6009E-05	0.290572	0.003547016
561	1.57432E-11	1.51E-06	0.005886101	1.41593E-05	0.296089	0.005516616
562	1.21582E-11	1.43E-06	0.005977448	1.25095E-05	0.300569	0.004480733
563	9.37463E-12	1.35E-06	0.006067786	1.10396E-05	0.304009	0.003439451
564	7.21676E-12	1.27E-06	0.006157025	9.73156E-06	0.309402	0.005392852
565	5.54672E-12	1.2E-06	0.006245079	8.56901E-06	0.312743	0.003341017
566	4.25633E-12	1.14E-06	0.006331858	7.53696E-06	0.317027	0.00428403
567	3.26091E-12	1.07E-06	0.006417276	6.62185E-06	0.321249	0.004221975
568	2.4943E-12	1.01E-06	0.006501245	5.81139E-06	0.326404	0.00515494
569	1.90486E-12	9.57E-07	0.006583679	5.09445E-06	0.330487	0.004083013
570	1.45238E-12	9.04E-07	0.006664492	4.46101E-06	0.334493	0.004006284
571	1.10562E-12	8.53E-07	0.006743599	3.90199E-06	0.338418	0.003924849
572	8.40303E-13	8.05E-07	0.006820916	3.40923E-06	0.341256	0.002838802
573	6.37632E-13	7.59E-07	0.00689636	2.97539E-06	0.345005	0.003748246
574	4.8307E-13	7.16E-07	0.00696985	2.59387E-06	0.349658	0.004653284
575	3.65389E-13	6.75E-07	0.007041307	2.25877E-06	0.353212	0.003554023
576	2.75934E-13	6.37E-07	0.007110651	1.96477E-06	0.354663	0.001450577
577	2.08047E-13	6.01E-07	0.007177806	1.70714E-06	0.358006	0.003343061
578	1.56611E-13	5.66E-07	0.007242698	1.48164E-06	0.361237	0.003231597
579	1.17703E-13	5.34E-07	0.007305253	1.28451E-06	0.364354	0.003116308
580	8.83196E-14	5.03E-07	0.007365403	1.11236E-06	0.368351	0.003997324
581	6.61657E-14	4.74E-07	0.007423078	9.62218E-07	0.372226	0.00387478
582	4.94896E-14	4.46E-07	0.007478212	8.31416E-07	0.373975	0.001748815
583	3.69573E-14	4.21E-07	0.007530743	7.17597E-07	0.377594	0.00361957
584	2.75544E-14	3.96E-07	0.007580611	6.18671E-07	0.380081	0.002487195
585	2.0511E-14	3.73E-07	0.007627756	5.32791E-07	0.381433	0.00135184
586	1.52436E-14	3.51E-07	0.007672126	4.58323E-07	0.382647	0.001213663
587	1.13108E-14	3.31E-07	0.007713667	3.93825E-07	0.38472	0.002072823
588	8.37928E-15	3.11E-07	0.007752332	3.38028E-07	0.386649	0.001929485
589	6.1976E-15	2.93E-07	0.007788075	2.89814E-07	0.388433	0.001783817
590	4.57663E-15	2.76E-07	0.007820854	2.48202E-07	0.392069	0.00363599
591	3.37421E-15	2.59E-07	0.00785063	2.12328E-07	0.393555	0.00148618
592	2.48373E-15	2.44E-07	0.007877367	1.81437E-07	0.39289	-0.00066544
593	1.82533E-15	2.29E-07	0.007901035	1.54868E-07	0.396071	0.003181325
594	1.33932E-15	2.16E-07	0.007921604	1.32043E-07	0.396098	2.66458E-05
595	9.81142E-16	2.03E-07	0.007939051	1.12457E-07	0.395968	-0.00012929
596	7.17604E-16	1.91E-07	0.007953354	9.56703E-08	0.398682	0.002713711
597	5.24013E-16	1.79E-07	0.007964497	8.12987E-08	0.399238	0.000555833
598	3.82037E-16	1.68E-07	0.007972465	6.90093E-08	0.399635	0.00039727

599	2.78082E-16	1.58E-07	0.00797725	5.85125E-08	0.397873	-0.00176179
600	2.02091E-16	1.49E-07	0.007978846	4.95573E-08	0.398952	0.001078854
601	1.46631E-16	1.4E-07	0.00797725	4.19261E-08	0.399872	0.000919387
602	1.06221E-16	1.31E-07	0.007972465	3.54305E-08	0.397632	-0.00224
603	7.6824E-17	1.23E-07	0.007964497	2.99081E-08	0.399232	0.0016009
604	5.54742E-17	1.16E-07	0.007953354	2.52184E-08	0.398675	-0.00055774
605	3.99935E-17	1.09E-07	0.007939051	2.12405E-08	0.397959	-0.00071571
606	2.87868E-17	1.02E-07	0.007921604	1.78701E-08	0.396086	-0.00187284
607	2.06872E-17	9.56E-08	0.007901035	1.50179E-08	0.396057	-2.8927E-05
608	1.48428E-17	8.97E-08	0.007877367	1.26069E-08	0.394873	-0.00118379
609	1.06325E-17	8.42E-08	0.00785063	1.05712E-08	0.393536	-0.00133726
610	7.60433E-18	7.9E-08	0.007820854	8.85434E-09	0.391047	-0.00248914
611	5.42988E-18	7.41E-08	0.007788075	7.4081E-09	0.390408	-0.00063925
612	3.87102E-18	6.94E-08	0.007752332	6.19121E-09	0.38762	-0.00278744
613	2.75528E-18	6.51E-08	0.007713667	5.16846E-09	0.385687	-0.00193351
614	1.95799E-18	6.1E-08	0.007672126	4.30987E-09	0.38261	-0.00307732
615	1.38919E-18	5.72E-08	0.007627756	3.58992E-09	0.381391	-0.0012187
616	9.84046E-19	5.36E-08	0.007580611	2.98691E-09	0.378033	-0.0033575
617	6.95946E-19	5.02E-08	0.007530743	2.48244E-09	0.37554	-0.00249356
618	4.91407E-19	4.71E-08	0.007478212	2.06087E-09	0.372913	-0.00262674
619	3.46427E-19	4.41E-08	0.007423078	1.709E-09	0.370156	-0.00275689
620	2.4383E-19	4.13E-08	0.007365403	1.41563E-09	0.369272	-0.00088389
621	1.71344E-19	3.87E-08	0.007305253	1.17132E-09	0.364265	-0.00500761
622	1.20214E-19	3.62E-08	0.007242698	9.68094E-10	0.363137	-0.00112792
623	8.42065E-20	3.39E-08	0.007177806	7.99241E-10	0.359892	-0.00324472
624	5.88901E-20	3.17E-08	0.007110651	6.59107E-10	0.354534	-0.00535788
625	4.11191E-20	2.97E-08	0.007041307	5.42939E-10	0.352067	-0.00246731
626	2.86649E-20	2.78E-08	0.00696985	4.46749E-10	0.347494	-0.00457291
627	1.99509E-20	2.6E-08	0.00689636	3.67192E-10	0.343819	-0.0036746
628	1.38637E-20	2.43E-08	0.006820916	3.01468E-10	0.341047	-0.0027723
629	9.61835E-21	2.27E-08	0.006743599	2.47233E-10	0.338181	-0.00286593
630	6.66235E-21	2.13E-08	0.006664492	2.02529E-10	0.333226	-0.00495542
631	4.60744E-21	1.99E-08	0.006583679	1.65725E-10	0.329185	-0.00404071
632	3.18124E-21	1.86E-08	0.006501245	1.35458E-10	0.326063	-0.00312176
633	2.193E-21	1.74E-08	0.006417276	1.10596E-10	0.320865	-0.00519852
634	1.50934E-21	1.62E-08	0.006331858	9.0197E-11	0.317594	-0.00327095
635	1.03715E-21	1.52E-08	0.006245079	7.34788E-11	0.311255	-0.00633903
636	7.11537E-22	1.42E-08	0.006157025	5.97928E-11	0.308852	-0.00240272
637	4.87372E-22	1.32E-08	0.006067786	4.86019E-11	0.30239	-0.00646202
638	3.33295E-22	1.24E-08	0.005977448	3.94617E-11	0.299873	-0.00251692
639	2.27563E-22	1.15E-08	0.005886101	3.20048E-11	0.295306	-0.00456742
640	1.55124E-22	1.08E-08	0.005793831	2.59282E-11	0.289692	-0.00561352
641	1.05576E-22	1.01E-08	0.005700727	2.0982E-11	0.284037	-0.00565523
642	7.17385E-23	9.38E-09	0.005606876	1.69605E-11	0.281344	-0.00269258
643	4.86683E-23	8.76E-09	0.005512365	1.36945E-11	0.275619	-0.0057256
644	3.29644E-23	8.17E-09	0.005417279	1.10452E-11	0.269864	-0.0057543
645	2.2292E-23	7.62E-09	0.005321705	8.89852E-12	0.265086	-0.00477875
646	1.50508E-23	7.11E-09	0.005225726	7.1611E-12	0.262287	-0.00279897
647	1.01455E-23	6.63E-09	0.005129426	5.7565E-12	0.257472	-0.00481503
648	6.82797E-24	6.18E-09	0.005032887	4.62227E-12	0.251645	-0.00582698

649	4.58793E-24	5.76E-09	0.00493619	3.7074E-12	0.24681	-0.00483487
650	3.07784E-24	5.37E-09	0.004839414	2.9703E-12	0.240971	-0.00583879
651	2.06149E-24	5.01E-09	0.004742639	2.37711E-12	0.236132	-0.00483879
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653	9.20377E-25	4.35E-09	0.004549393	1.5174E-12	0.22847	-0.00282739
654	6.13502E-25	4.05E-09	0.00445307	1.21032E-12	0.221654	-0.00681615
655	4.08292E-25	3.77E-09	0.004357044	9.64315E-13	0.218852	-0.00280134
656	2.71289E-25	3.51E-09	0.004261383	7.67459E-13	0.214069	-0.00478304
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659	7.88213E-26	2.84E-09	0.003977262	3.84298E-13	0.199863	-0.00470828
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662	2.25736E-26	2.29E-09	0.003698746	1.90519E-13	0.184937	-0.00560589
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664	9.7297E-27	1.98E-09	0.003516949	1.18679E-13	0.176848	-0.00352374
665	6.37244E-27	1.84E-09	0.003427372	9.35115E-14	0.172369	-0.00447885
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671	4.86355E-28	1.19E-09	0.002911283	2.1862E-14	0.145564	-0.00516334
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676	5.45402E-29	8.19E-10	0.002513293	6.31599E-15	0.125665	-0.00385296
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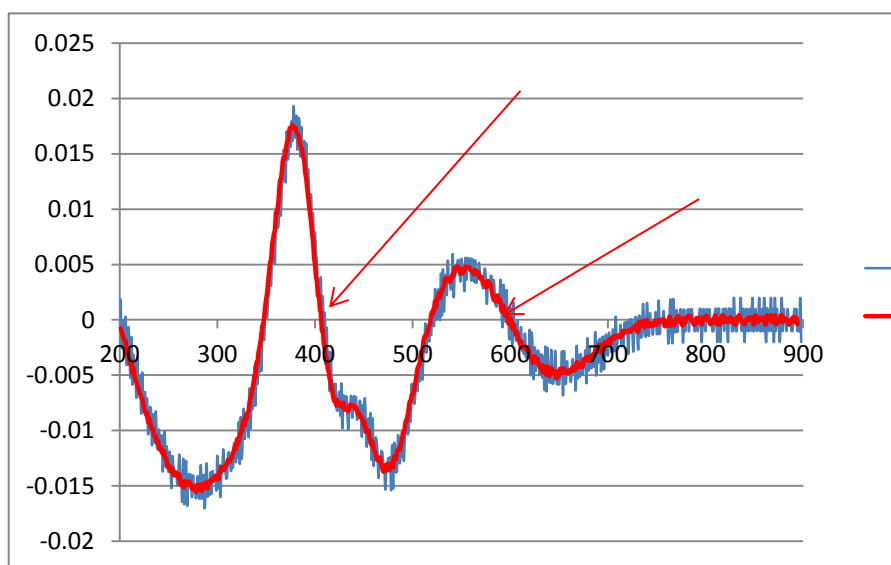
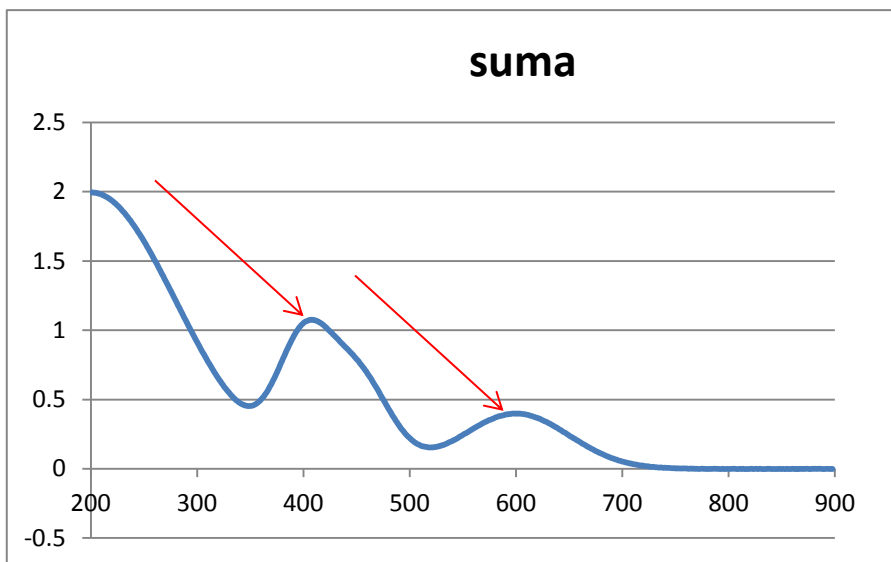
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799	7.77817E-58	2.67E-14	2.89895E-06	5.44863E-32	0.000145	-1.1978E-05
800	4.10465E-58	2.43E-14	2.6766E-06	3.69519E-32	-0.00087	-0.00101112
801	2.16262E-58	2.22E-14	2.47032E-06	2.50324E-32	0.000124	0.000989686
802	1.1376E-58	2.02E-14	2.27903E-06	1.6939E-32	0.000114	-9.5648E-06
803	5.97453E-59	1.84E-14	2.10171E-06	1.14495E-32	0.000105	-8.8661E-06
804	3.13273E-59	1.67E-14	1.9374E-06	7.73049E-33	0.001097	0.000991785
805	1.64002E-59	1.52E-14	1.78523E-06	5.21367E-33	0.001089	-7.6086E-06
806	8.57192E-60	1.38E-14	1.64436E-06	3.51234E-33	0.001082	-7.0438E-06
807	4.47314E-60	1.26E-14	1.51399E-06	2.36357E-33	7.57E-05	-0.00100652
808	2.33052E-60	1.14E-14	1.3934E-06	1.58875E-33	-0.00093	-0.00100603
809	1.21227E-60	1.04E-14	1.28191E-06	1.06675E-33	-0.00094	-5.5748E-06
810	6.29576E-61	9.46E-15	1.17886E-06	7.15461E-34	5.89E-05	0.000994848
811	3.2644E-61	8.6E-15	1.08367E-06	4.79322E-34	0.001054	0.00099524
812	1.68991E-61	7.81E-15	9.95758E-07	3.20764E-34	-0.00095	-0.0020044
813	8.73433E-62	7.1E-15	9.14616E-07	2.14418E-34	4.57E-05	0.000995943
814	4.50713E-62	6.45E-15	8.3975E-07	1.43171E-34	0.001042	0.000996257
815	2.32208E-62	5.86E-15	7.70704E-07	9.54916E-35	-0.00096	-0.00200345
816	1.19442E-62	5.32E-15	7.07052E-07	6.362E-35	-0.00096	-3.1826E-06
817	6.134E-63	4.84E-15	6.48398E-07	4.23389E-35	-0.00097	-2.9327E-06
818	3.1451E-63	4.39E-15	5.94371E-07	2.81451E-35	2.97E-05	0.000997299
819	1.61002E-63	3.99E-15	5.44629E-07	1.86889E-35	-0.00097	-0.00100249
820	8.22873E-64	3.62E-15	4.98849E-07	1.2396E-35	2.49E-05	0.000997711
821	4.19894E-64	3.28E-15	4.56735E-07	8.21289E-36	0.001023	0.000997894
822	2.1392E-64	2.98E-15	4.1801E-07	5.43537E-36	0.001021	-1.9363E-06
823	1.0881E-64	2.7E-15	3.82414E-07	3.59318E-36	-0.00098	-0.00200178
824	5.52574E-65	2.45E-15	3.4971E-07	2.37272E-36	1.75E-05	0.000998365
825	2.80167E-65	2.22E-15	3.19675E-07	1.56507E-36	1.6E-05	-1.5018E-06
826	1.41824E-65	2.02E-15	2.92102E-07	1.03118E-36	0.001015	0.000998621
827	7.16782E-66	1.83E-15	2.66801E-07	6.78665E-37	1.33E-05	-0.00100127
828	3.61684E-66	1.66E-15	2.43594E-07	4.46162E-37	-0.00099	-0.00100116
829	1.82212E-66	1.5E-15	2.22317E-07	2.92987E-37	0.001011	0.001998936
830	9.16495E-67	1.36E-15	2.02817E-07	1.92185E-37	0.00101	-9.75E-07
831	4.60244E-67	1.23E-15	1.84953E-07	1.25925E-37	9.25E-06	-0.00100089
832	2.30755E-67	1.12E-15	1.68596E-07	8.24172E-38	-0.00099	-0.00100082
833	1.1551E-67	1.01E-15	1.53623E-07	5.38819E-38	-0.00099	-7.4862E-07
834	5.77289E-68	9.18E-16	1.39925E-07	3.51872E-38	-0.00099	-6.8494E-07
835	2.88052E-68	8.31E-16	1.27397E-07	2.29533E-38	-0.00099	-6.2641E-07
836	1.43501E-68	7.53E-16	1.15944E-07	1.49562E-38	0.001006	0.001999427
837	7.13746E-69	6.82E-16	1.05478E-07	9.73456E-39	5.27E-06	-0.00100052
838	3.54436E-69	6.17E-16	9.5919E-08	6.3289E-39	0.001005	0.000999522
839	1.75726E-69	5.58E-16	8.71913E-08	4.11015E-39	0.001004	-4.3639E-07
840	8.69843E-70	5.05E-16	7.9226E-08	2.66628E-39	-0.001	-0.0020004
841	4.29883E-70	4.57E-16	7.19596E-08	1.7277E-39	3.6E-06	0.000999637
842	2.12112E-70	4.14E-16	6.53335E-08	1.11828E-39	-0.001	-0.00100033
843	1.04492E-70	3.74E-16	5.92938E-08	7.23021E-40	2.96E-06	0.000999698
844	5.13935E-71	3.38E-16	5.37909E-08	4.66947E-40	-0.001	-0.00100028
845	2.5237E-71	3.06E-16	4.87792E-08	3.01233E-40	-0.001	-2.5058E-07
846	1.23729E-71	2.76E-16	4.42168E-08	1.94113E-40	2.21E-06	0.000999772
847	6.05638E-72	2.5E-16	4.0065E-08	1.24946E-40	-0.001	-0.00100021
848	2.95977E-72	2.26E-16	3.62886E-08	8.03358E-41	0.001002	0.001999811

849	1.44414E-72	2.04E-16	3.2855E-08	5.15957E-41	1.64E-06	-0.00100017
850	7.035E-73	1.84E-16	2.97344E-08	3.31005E-41	-0.001	-0.00100016
851	3.42156E-73	1.67E-16	2.68994E-08	2.12116E-41	1.34E-06	0.000999858
852	1.66146E-73	1.5E-16	2.4325E-08	1.35778E-41	1.22E-06	-1.2872E-07
853	8.05492E-74	1.36E-16	2.19882E-08	8.68169E-42	-0.001	-0.00100012
854	3.89885E-74	1.23E-16	1.98679E-08	5.54492E-42	-0.001	-1.0601E-07
855	1.88416E-74	1.11E-16	1.79449E-08	3.53756E-42	0.001001	0.001999904
856	9.09084E-75	1E-16	1.62015E-08	2.2544E-42	8.1E-07	-0.00100009
857	4.37921E-75	9.02E-17	1.46217E-08	1.43507E-42	-0.001	-0.00100008
858	2.10616E-75	8.14E-17	1.31906E-08	9.12505E-43	6.6E-07	0.000999928
859	1.01133E-75	7.35E-17	1.18948E-08	5.7958E-43	-0.001	-0.00100006
860	4.84842E-76	6.63E-17	1.07221E-08	3.67714E-43	0.001001	0.001999941
861	2.32066E-76	5.98E-17	9.66107E-09	2.33036E-43	0.001	-5.305E-08
862	1.10899E-76	5.39E-17	8.70158E-09	1.47521E-43	-0.001	-0.00200005
863	5.29116E-77	4.86E-17	7.83424E-09	9.3283E-44	3.92E-07	0.000999957
864	2.52045E-77	4.38E-17	7.05054E-09	5.89207E-44	3.53E-07	-3.9185E-08
865	1.1987E-77	3.95E-17	6.3427E-09	3.7175E-44	-0.001	-0.00100004
866	5.69178E-78	3.56E-17	5.70364E-09	2.34289E-44	-0.001	-3.1953E-08
867	2.6983E-78	3.21E-17	5.12692E-09	1.47493E-44	0.001	0.001999971
868	1.27714E-78	2.89E-17	4.60667E-09	9.27483E-45	2.3E-07	-0.00100003
869	6.03519E-79	2.6E-17	4.13755E-09	5.82585E-45	0.001	0.000999977
870	2.8474E-79	2.34E-17	3.71472E-09	3.65536E-45	-0.001	-0.00200002
871	1.34126E-79	2.11E-17	3.33377E-09	2.29096E-45	0.001	0.001999981
872	6.30784E-80	1.9E-17	2.99069E-09	1.43424E-45	1.5E-07	-0.00100002
873	2.96179E-80	1.71E-17	2.68184E-09	8.96904E-46	0.001	0.000999985
874	1.38846E-80	1.54E-17	2.40393E-09	5.60256E-46	0.001	-1.3896E-08
875	6.49854E-81	1.39E-17	2.15395E-09	3.49578E-46	0.001	-1.2499E-08
876	3.03672E-81	1.25E-17	1.9292E-09	2.17881E-46	-0.001	-0.00200001
877	1.41677E-81	1.12E-17	1.7272E-09	1.35648E-46	-0.001	-1.01E-08
878	6.5993E-82	1.01E-17	1.54574E-09	8.43572E-47	0.001	0.001999991
879	3.06904E-82	9.08E-18	1.38279E-09	5.24022E-47	6.91E-08	-0.00100001
880	1.42499E-82	8.17E-18	1.23652E-09	3.25158E-47	0.001	0.000999993
881	6.6058E-83	7.34E-18	1.10529E-09	2.01538E-47	0.001	-6.5619E-09
882	3.05735E-83	6.6E-18	9.87582E-10	1.24778E-47	0.001	-5.8852E-09
883	1.41276E-83	5.93E-18	8.8206E-10	7.71675E-48	4.41E-08	-0.00100001
884	6.51778E-84	5.33E-18	7.87497E-10	4.76704E-48	0.001	0.000999995
885	3.00216E-84	4.79E-18	7.02791E-10	2.94158E-48	0.001	-4.2353E-09
886	1.38062E-84	4.3E-18	6.26945E-10	1.81314E-48	0.001	-3.7923E-09
887	6.33898E-85	3.87E-18	5.59062E-10	1.11634E-48	0.001	-3.3942E-09
888	2.90583E-85	3.47E-18	4.98329E-10	6.86567E-49	2.49E-08	-0.001
889	1.32992E-85	3.12E-18	4.44016E-10	4.21779E-49	-0.001	-0.001
890	6.07695E-86	2.8E-18	3.95464E-10	2.58824E-49	-0.001	-2.4276E-09
891	2.77237E-86	2.51E-18	3.5208E-10	1.58651E-49	1.76E-08	0.000999998
892	1.26276E-86	2.26E-18	3.13331E-10	9.71395E-50	1.57E-08	-1.9375E-09
893	5.74247E-87	2.02E-18	2.78734E-10	5.94111E-50	0.001	0.000999998
894	2.60723E-87	1.82E-18	2.47859E-10	3.62959E-50	1.24E-08	-0.001
895	1.18186E-87	1.63E-18	2.20315E-10	2.21495E-50	1.1E-08	-1.3772E-09
896	5.34881E-88	1.46E-18	1.95754E-10	1.35017E-50	-0.001	-0.001
897	2.41687E-88	1.31E-18	1.73862E-10	8.2211E-51	0.001	0.001999999
898	1.09032E-88	1.18E-18	1.54356E-10	5.00022E-51	-0.001	-0.002

mkp(5) 2.derivace

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-0.00982 -2.9E-05
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-0.01048 -1.6E-05
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-0.0117 -0.0004
-0.01149 0.000208
-0.01188 -0.00039
-0.01206 -0.00018
-0.01183 0.000223
-0.01221 -0.00037
-0.01257 -0.00037
-0.01253 3.86E-05



- 1/ sestrojte graf spektra (závislost absorpance na vlnové délce)
- 2/ sestrojte graf 1. derivace spektra
- 3/ derivační spektrum odšuměte (met.klouz.prům., okno 5)

-0.01329	-0.00076
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-0.01366	-0.00014
-0.01339	0.00027
-0.01392	-0.00052
-0.01404	-0.00012
-0.01375	0.000286
-0.01386	-0.00011
-0.01396	-0.0001
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-0.01395	0.000308
-0.01484	-0.00089
-0.01492	-8.1E-05
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-0.01467	-7.1E-05
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-0.01459	0.00054
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-0.01552	-0.0002
-0.01492	0.0006
-0.01511	-0.0002
-0.0153	-0.00019
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-0.01435	-0.00012
-0.01406	0.000283

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-0.01337	-8.8E-05
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-0.01353	-7.8E-05
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-0.01269	0.000154
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-0.01236	0.000168
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-0.01141	0.00039
-0.01161	-0.0002
-0.01081	0.000808
-0.01119	-0.00038
-0.01076	0.000427
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0.005364	0.000145
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0.007262	0.000549
0.007809	0.000547
0.008152	0.000343
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0.01273	0.000246
0.013348	0.000618
0.014335	0.000987
0.014687	0.000352
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0.015899	0.000627
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-0.01084	-0.00084
-0.01089	-4.5E-05
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-0.01344	-0.0004
-0.01302	0.000424
-0.01357	-0.00055
-0.0131	0.000473
-0.0132	-0.0001
-0.01288	0.00032
-0.01334	-0.00046
-0.01237	0.000967
-0.01258	-0.00021
-0.01257	1.01E-05
-0.01194	0.000631
-0.01169	0.00025
-0.01162	6.9E-05
-0.01174	-0.00011
-0.01123	0.000503
-0.01091	0.000318
-0.01018	0.000732
-0.01024	-5.5E-05
-0.00968	0.000556
-0.00912	0.000566
-0.00914	-2.5E-05
-0.00856	0.000583
-0.00797	0.000589
-0.00737	0.000594
-0.00737	-1.7E-06

-0.00677	0.000601
-0.00677	2.66E-06
-0.00657	0.000203
-0.00597	0.000603
-0.00556	0.000401
-0.00497	0.000599
-0.00437	0.000595
-0.00418	0.000191
-0.00399	0.000186
-0.00341	0.00058
-0.00284	0.000574
-0.00287	-3.3E-05
-0.00191	0.000959
-0.00156	0.000352
-0.00142	0.000143
-0.00148	-6.6E-05
-0.00116	0.000325
-0.00084	0.000316
-0.00054	0.000306
-0.00024	0.000297
0.000447	0.000687
0.000724	0.000277
0.000591	-0.00013
0.001047	0.000457
0.001694	0.000647
0.001131	-0.00056
0.001957	0.000827
0.001974	1.67E-05
0.002381	0.000407
0.001978	-0.0004
0.002566	0.000588
0.002544	-2.2E-05
0.002913	0.000369
0.003073	0.00016
0.003624	0.000551
0.003766	0.000142
0.003499	-0.00027
0.003624	0.000125
0.003741	0.000117
0.00345	-0.00029
0.00355	0.000101
0.003843	0.000293
0.004128	0.000285
0.004006	-0.00012
0.004677	0.00067
0.00474	6.33E-05
0.004596	-0.00014
0.004845	0.000249
0.004688	-0.00016
0.004524	-0.00016

0.004153	-0.00037
0.004576	0.000423
0.004193	-0.00038
0.004403	0.00021
0.004408	4.37E-06
0.004806	0.000398
0.004799	-7.5E-06
0.004785	-1.3E-05
0.004766	-1.9E-05
0.004741	-2.5E-05
0.004511	-0.00023
0.004475	-3.6E-05
0.004434	-4.1E-05
0.004188	-0.00025
0.004136	-5.2E-05
0.004479	0.000343
0.004217	-0.00026
0.00435	0.000133
0.004278	-7.2E-05
0.004002	-0.00028
0.00372	-0.00028
0.003834	0.000114
0.003744	-9E-05
0.003249	-0.00049
0.00335	0.000101
0.003247	-0.0001
0.002939	-0.00031
0.003028	8.87E-05
0.003513	0.000485
0.003194	-0.00032
0.003271	7.76E-05
0.003146	-0.00013
0.002616	-0.00053
0.002084	-0.00053
0.002149	6.48E-05
0.001811	-0.00034
0.00167	-0.00014
0.002127	0.000457
0.002182	5.45E-05
0.001634	-0.00055
0.001884	0.00025
0.001533	-0.00035
0.00078	-0.00075
0.001025	0.000246
0.00127	0.000244
0.000713	-0.00056
0.000355	-0.00036
0.000597	0.000242
0.000238	-0.00036
-0.00032	-0.00056

-8.1E-05	0.000241
0.00016	0.000241
-0.0002	-0.00036
-0.00076	-0.00056
-0.00031	0.000442
-0.00087	-0.00056
-0.00103	-0.00016
-0.00138	-0.00035
-0.00114	0.000247
-0.00169	-0.00055
-0.00184	-0.00015
-0.00219	-0.00035
-0.00193	0.000254
-0.00247	-0.00054
-0.00242	5.88E-05
-0.00255	-0.00014
-0.00249	6.41E-05
-0.00242	6.7E-05
-0.00275	-0.00033
-0.00248	0.000273
-0.0026	-0.00012
-0.00312	-0.00052
-0.00344	-0.00032
-0.00335	8.69E-05
-0.00386	-0.00051
-0.00377	9.45E-05
-0.00327	0.000498
-0.00377	-0.0005
-0.00366	0.000106
-0.00355	0.000111
-0.00404	-0.00049
-0.00412	-8.1E-05
-0.00439	-0.00028
-0.00407	0.000328
-0.00473	-0.00067
-0.0042	0.000536
-0.00446	-0.00026
-0.00431	0.000145
-0.00496	-0.00065
-0.00421	0.000754
-0.00485	-0.00064
-0.00509	-0.00024
-0.00492	0.000167
-0.00435	0.000571
-0.00477	-0.00042
-0.00479	-2E-05
-0.00461	0.000184
-0.00482	-0.00021
-0.00523	-0.00041
-0.00523	-4E-06

-0.00463	0.0006
-0.00503	-0.0004
-0.00442	0.000607
-0.00441	1.11E-05
-0.0046	-0.00019
-0.00478	-0.00018
-0.00436	0.000422
-0.00473	-0.00038
-0.00471	2.8E-05
-0.00467	3.11E-05
-0.00484	-0.00017
-0.0046	0.000237
-0.00456	3.96E-05
-0.00452	4.23E-05
-0.00468	-0.00016
-0.00423	0.000447
-0.00458	-0.00035
-0.00433	0.000252
-0.00447	-0.00015
-0.00382	0.000656
-0.00416	-0.00034
-0.0041	5.91E-05
-0.00424	-0.00014
-0.00398	0.000262
-0.00392	6.34E-05
-0.00425	-0.00034
-0.00359	0.000666
-0.00372	-0.00013
-0.00345	0.000268
-0.00358	-0.00013
-0.00331	0.000269
-0.00364	-0.00033
-0.00337	0.00027
-0.0037	-0.00033
-0.00323	0.000471
-0.00336	-0.00013
-0.00309	0.000271
-0.00322	-0.00013
-0.00275	0.000471
-0.00288	-0.00013
-0.00281	7.07E-05
-0.00274	7.04E-05
-0.00227	0.00047
-0.0028	-0.00053
-0.00293	-0.00013
-0.00226	0.000668
-0.00239	-0.00013
-0.00272	-0.00033
-0.00206	0.000666
-0.00199	6.56E-05

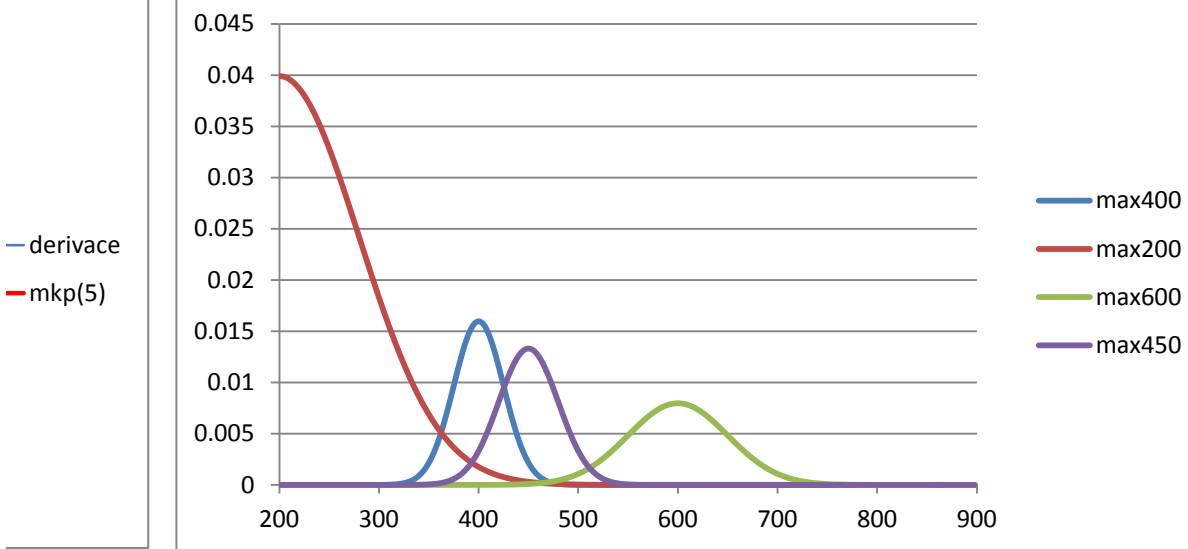
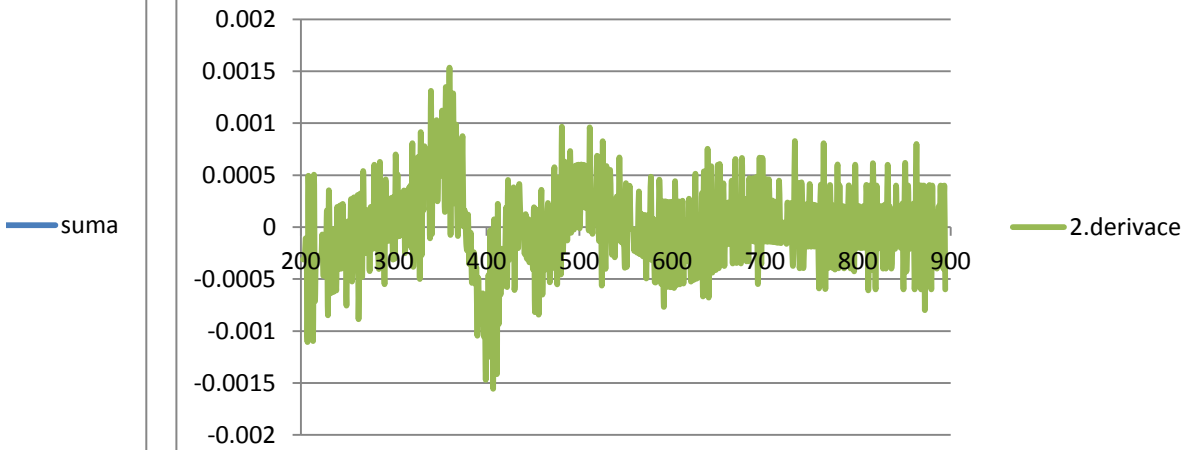
-0.00213	-0.00014
-0.00226	-0.00014
-0.0018	0.000463
-0.00194	-0.00014
-0.00208	-0.00014
-0.00162	0.00046
-0.00156	5.89E-05
-0.0017	-0.00014
-0.00165	5.67E-05
-0.00139	0.000256
-0.00153	-0.00015
-0.00148	5.33E-05
-0.00143	5.22E-05
-0.00158	-0.00015
-0.00133	0.00025
-0.00148	-0.00015
-0.00103	0.000447
-0.00099	4.62E-05
-0.00114	-0.00015
-0.0011	4.38E-05
-0.00105	4.26E-05
-0.00101	4.15E-05
-0.00097	4.03E-05
-0.00093	3.91E-05
-0.0011	-0.00016
-0.00086	0.000237
-0.00082	3.57E-05
-0.00079	3.46E-05
-0.00076	3.35E-05
-0.00052	0.000232
-0.00069	-0.00017
-0.00106	-0.00037
-0.00103	2.92E-05
-0.0002	0.000828
-0.00038	-0.00017
-0.00055	-0.00017
-0.00053	2.53E-05
-0.0001	0.000424
-0.00048	-0.00038
-0.00066	-0.00018
-0.00023	0.000422
-1.3E-05	0.000221
-0.00039	-0.00038
-0.00057	-0.00018
-0.00035	0.000218
-0.00054	-0.00018
-0.00032	0.000217
-0.0005	-0.00018
-0.00049	1.55E-05
-7.4E-05	0.000415

-0.00026	-0.00019
-0.00045	-0.00019
-0.00023	0.000213
-2.1E-05	0.000212
-0.00021	-0.00019
2.47E-06	0.000211
1.32E-05	1.07E-05
2.35E-05	1.02E-05
3.32E-05	9.75E-06
-0.00056	-0.00059
-0.00055	8.83E-06
-0.00014	0.000408
-0.00013	7.98E-06
-0.00052	-0.00039
0.000282	0.000807
8.93E-05	-0.00019
-0.0005	-0.00059
-0.0003	0.000206
-9.2E-05	0.000206
-0.00049	-0.00039
-0.00028	0.000205
0.000123	0.000405
0.000128	4.67E-06
0.000333	0.000204
-6.3E-05	-0.0004
0.000141	0.000204
-0.00026	-0.0004
-0.00045	-0.0002
-0.00045	3.31E-06
0.000154	0.000603
-0.00024	-0.0004
0.00016	0.000403
0.000163	2.6E-06
0.000365	0.000202
0.000167	-0.0002
0.000369	0.000202
-2.8E-05	-0.0004
-2.7E-05	1.91E-06
-0.00022	-0.0002
-0.00042	-0.0002
-0.00042	1.58E-06
-2E-05	0.000401
0.000181	0.000201
-0.00022	-0.0004
-1.6E-05	0.000201
0.000185	0.000201
-1.4E-05	-0.0002
-0.00041	-0.0004
0.000188	0.000601
0.000189	8.64E-07

-1E-05	-0.0002
0.00019	0.000201
0.000391	0.000201
0.000192	-0.0002
-7.7E-06	-0.0002
-0.00021	-0.0002
-0.00041	-0.0002
-0.00021	0.0002
-5.6E-06	0.0002
-0.00021	-0.0002
0.000195	0.0004
0.000396	0.0002
-0.0002	-0.0006
-0.0004	-0.0002
-3.5E-06	0.0004
-3.2E-06	2.71E-07
-0.0004	-0.0004
0.000197	0.0006
0.000397	0.0002
0.000398	1.99E-07
-0.0002	-0.0006
0.000198	0.0004
-1.8E-06	-0.0002
-1.6E-06	1.45E-07
-0.0002	-0.0002
-1.4E-06	0.0002
0.000199	0.0002
0.000199	1.05E-07
-0.0002	-0.0004
-0.0002	8.94E-08
-9E-07	0.0002
-0.0004	-0.0004
-0.0004	6.97E-08
0.000199	0.0006
0.000199	5.89E-08
0.000399	0.0002
0.000399	4.97E-08
-4.8E-07	-0.0004
-0.0002	-0.0002
-0.0002	3.84E-08
-0.0002	3.52E-08
-0.0004	-0.0002
-3E-07	0.0004
-2.8E-07	2.7E-08
-2.5E-07	2.47E-08
0.0002	0.0002
0.0002	2.07E-08
-1.9E-07	-0.0002
-1.7E-07	1.73E-08
0.0002	0.0002

-0.0004	-0.0006
-0.0002	0.0002
0.0004	0.0006
-1.1E-07	-0.0004
-0.0002	-0.0002
0.0002	0.0004
-8E-08	-0.0002
-7.2E-08	7.5E-09
0.0002	0.0002
-5.9E-08	-0.0002
-5.4E-08	5.64E-09
0.0002	0.0002
-0.0004	-0.0006
-0.0004	4.22E-09
0.0004	0.0008
-3.2E-08	-0.0004
0.0002	0.0002
-2.6E-08	-0.0002
0.0004	0.0004
-0.0002	-0.0006
0.0002	0.0004
-1.7E-08	-0.0002
0.0004	0.0004
-0.0004	-0.0008
-0.0002	0.0002
-1.1E-08	0.0002
-0.0002	-0.0002
-9.2E-09	0.0002
0.0004	0.0004
0.0004	8.43E-10
-0.0002	-0.0006
0.0002	0.0004
-5.3E-09	-0.0002
-4.8E-09	5.54E-10
-4.3E-09	4.98E-10
-3.8E-09	4.48E-10
-0.0004	-0.0004
-0.0004	3.62E-10
-0.0002	0.0002
-0.0002	2.91E-10
0.0002	0.0004
0.0002	2.34E-10
0.0002	2.1E-10
-0.0002	-0.0004
0.0002	0.0004
-0.0004	-0.0006

2.derivace



<i>V [ml]</i>	<i>pH</i>
0.00	1.33
5.00	1.48
10.00	1.68
15.00	2.00
18.00	2.37
18.50	2.48
19.00	2.63
19.50	2.82
19.70	2.93
20.00	3.15
20.20	3.37
20.30	3.77
20.40	4.49
20.50	6.58
20.60	

Tab.1: Potenciometrická titrace silné kyseliny silnou zásadou

<i>V [ml]</i>	0	5.0	10.0	15.0	18.0	18.5	
<i>pH</i>	1.33	1.48	1.68	2.00	2.37	2.48	
<i>V [ml]</i>	20.2	20.3	20.4	20.5	20.6	20.7	
<i>pH</i>	3.37	3.77	4.49	6.58	9.38	10.17	
<i>V [ml]</i>	21.4	21.6	21.8	22.0	22.5	23.0	
<i>pH</i>	11.07	11.20	11.27	11.33	11.48	11.57	

(reálná experimentální data)

19.0	19.5	19.7	20.0
2.63	2.82	2.93	3.15
20.8	20.9	21.0	21.2
10.43	10.58	10.76	10.94
24.0	25.0	26.0	
11.70	11.81	11.88	

$$F_1 = (V_0 + V) \cdot 10^{-\text{pH}}$$

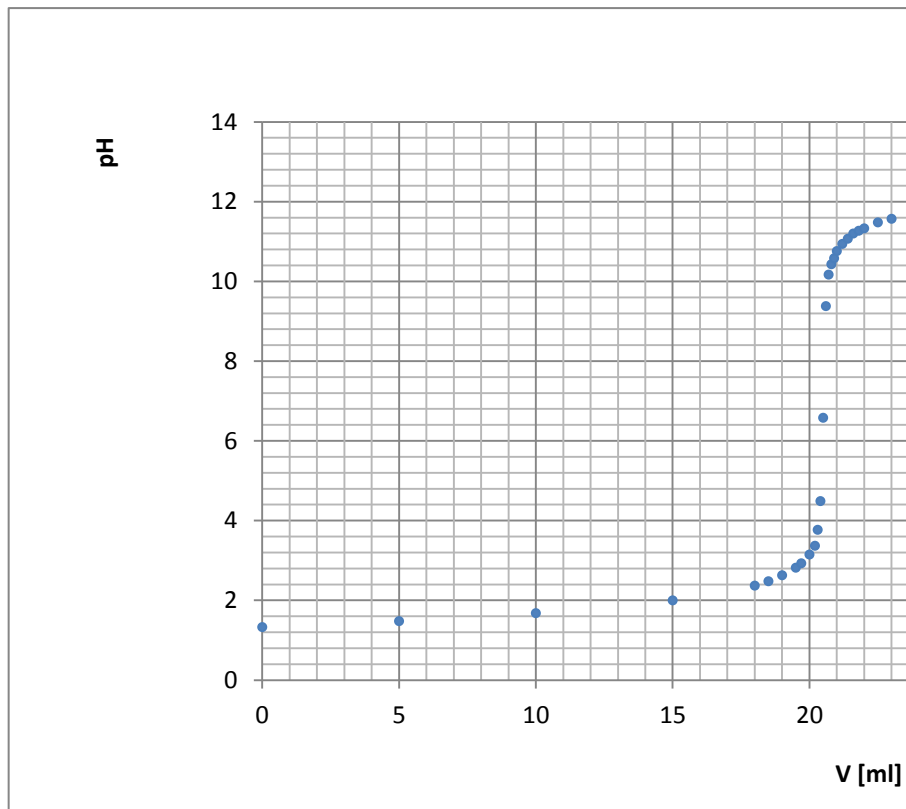
$$F_2 = (V_0 + V) \cdot 10^{\text{pH}}$$

$$V_{\text{eq}} = V_1 - \text{pH}''_1 \frac{V_2 - V_1}{\text{pH}''_2 - \text{pH}''_1}$$

$V [ml]$	pH
0.00	1.33
5.00	1.48
10.00	1.68
15.00	2.00
18.00	2.37
18.50	2.48
19.00	2.63
19.50	2.82
19.70	2.93
20.00	3.15
20.20	3.37
20.30	3.77
20.40	4.49
20.50	6.58
20.60	9.38
20.70	10.17
20.80	10.43
20.90	10.58
21.00	10.76
21.20	10.94
21.40	11.07
21.60	11.20
21.80	11.27
22.00	11.33
22.50	11.48
23.00	11.57
24.00	11.70
25.00	11.81
26.00	11.88

Tab.1: Potenciometrická titrace silné kyseliny silnou zásadou

$V [ml]$	0	5.0	10.0	15.0	18.0	18.5
pH	1.33	1.48	1.68	2.00	2.37	2.48
$V [ml]$	20.2	20.3	20.4	20.5	20.6	20.7
pH	3.37	3.77	4.49	6.58	9.38	10.17
$V [ml]$	21.4	21.6	21.8	22.0	22.5	23.0
pH	11.07	11.20	11.27	11.33	11.48	11.57



(reálná experimentální data)

19.0	19.5	19.7	20.0
2.63	2.82	2.93	3.15
20.8	20.9	21.0	21.2
10.43	10.58	10.76	10.94
24.0	25.0	26.0	
11.70	11.81	11.88	

1/ doplňte tabulku dat

2/ sestrojte titrační křivku (pouze body)

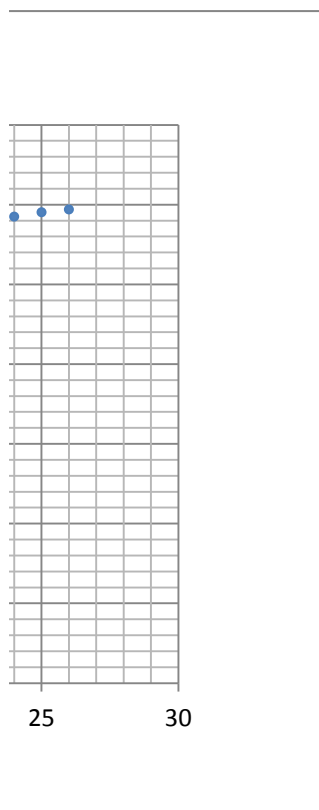
3/ nalezněte bod ekvivalence pomocí Hahnovy metody d1

4/ nalezněte bod ekvivalence pomocí Granovy transform

$$F_1 = (V_0 + V) \cdot 10^{-\text{pH}}$$

$$F_2 = (V_0 + V) \cdot 1$$

$$V_{\text{eq}} = V_1 - \text{pH}''_1 \frac{V_2 - V_1}{\text{pH}''_2 - \text{pH}''_1}$$



ruhé derivace
iace

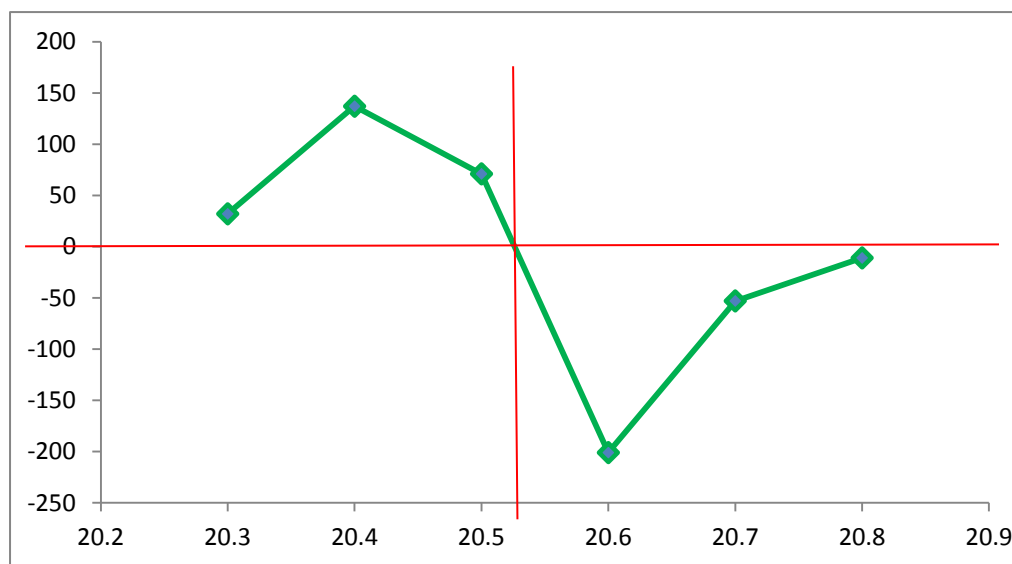
$10^{(pH-14)}$

—
'
1

V [ml]	pH	dpH/dV	d2pH/dV2
0.00	1.33		
5.00	1.48		
10.00	1.68		
15.00	2.00		
18.00	2.37		
18.50	2.48		
19.00	2.63		
19.50	2.82		
19.70	2.93		
20.00	3.15		
20.20	3.37		
20.30	3.77	20.25	4
20.40	4.49	20.35	7.2
20.50	6.58	20.45	20.9
20.60	9.38	20.55	28
20.70	10.17	20.65	7.9
20.80	10.43	20.75	2.6
20.90	10.58	20.85	1.5
21.00	10.76		
21.20	10.94		
21.40	11.07		
21.60	11.20		
21.80	11.27		
22.00	11.33		
22.50	11.48		
23.00	11.57		
24.00	11.70		
25.00	11.81		
26.00	11.88		

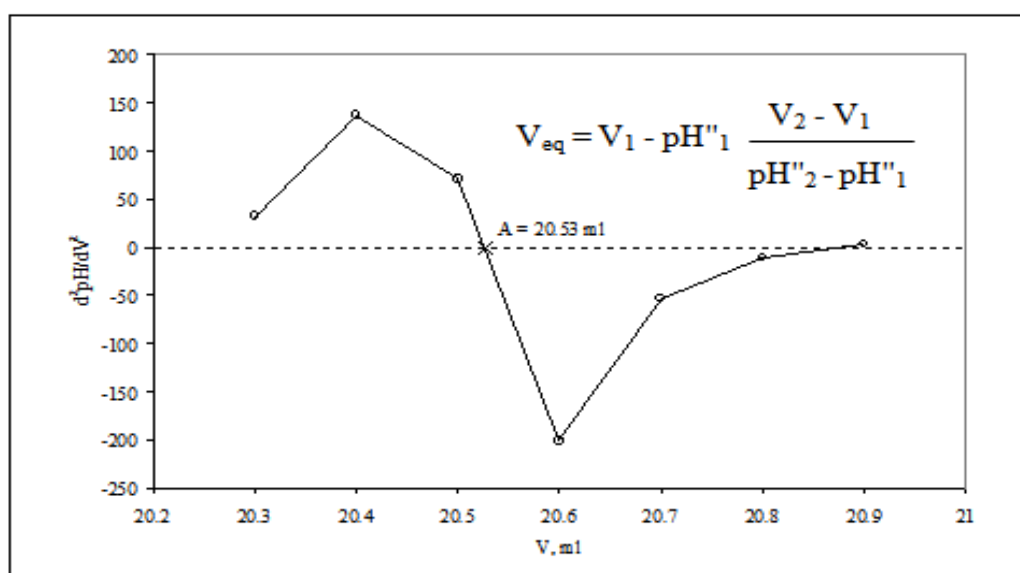
Tab.2: V

V [ml]
20.
20.
20.
20.
20.
20.
20.
20.
20.



Úpočet 1. a 2. derivace titrační křivky v okolí bodu ekvivalence

titrační křivky		body křivky 1.derivace		body křivky 2.derivace	
V [ml]	pH	V* [ml]	dpH/dV	V** [ml]	d ² pH/dV ²
	3.37				
	3.77	20.25	4	20.3	32
	4.49	20.35	7.2	20.4	137
	6.58	20.45	20.9	20.5	71
	9.38	20.55	28	20.6	-201
	10.17	20.65	7.9	20.7	-53
	10.43	20.75	2.6	20.8	-11
	10.58	20.85	1.5		

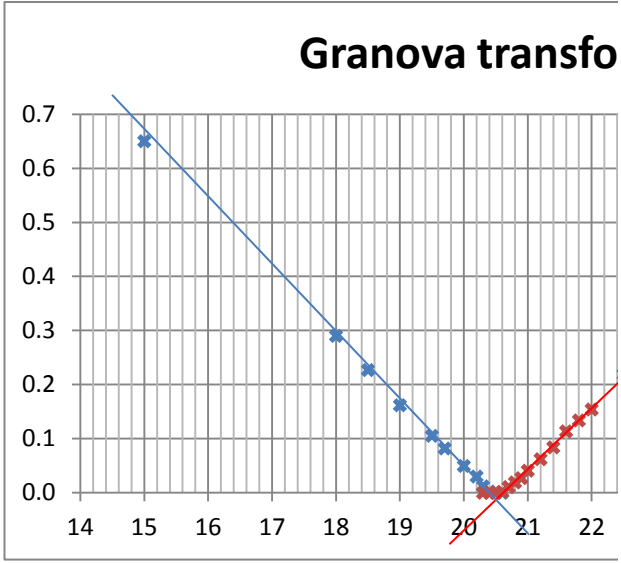


Obr.3: Křivka 2. derivace titrační křivky v okolí bodu ekvivalence

V [ml]	pH	F1	F2
0.00	1.33	2.33868	
5.00	1.48	1.82122	
10.00	1.68	1.25358	
15.00	2.00	0.65000	
18.00	2.37	0.29007	
18.50	2.48	0.22682	
19.00	2.63	0.16175	
19.50	2.82	0.10519	
19.70	2.93	0.08189	0.00000
20.00	3.15	0.04956	0.00000
20.20	3.37	0.02995	0.00000
20.30	3.77	0.01194	0.00000
20.40	4.49	0.00228	0.00000
20.50	6.58	0.00002	0.00000
20.60	9.38	0.00000	0.00169
20.70	10.17	0.00000	0.01046
20.80	10.43	0.00000	0.01906
20.90	10.58	0.00000	0.02696
21.00	10.76	0.00000	0.04086
21.20	10.94	0.00000	0.06201
21.40	11.07	0.00000	0.08389
21.60	11.20	0.00000	0.11348
21.80	11.27		0.13370
22.00	11.33		0.15393
22.50	11.48		0.21895
23.00	11.57		0.27122
24.00	11.70		0.37088
25.00	11.81		0.48424
26.00	11.88		0.57652

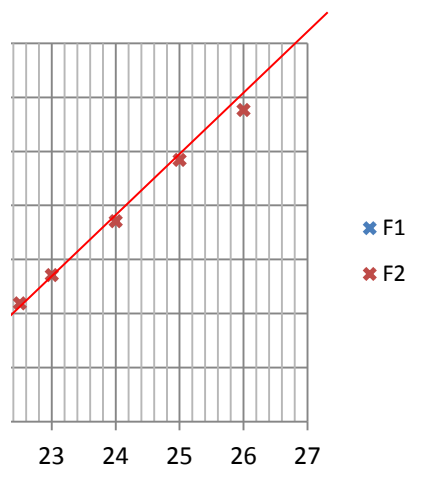
V0= 50 ml

$$F_1 = (V_0 + V) \cdot 10^{-\text{pH}} \quad F$$



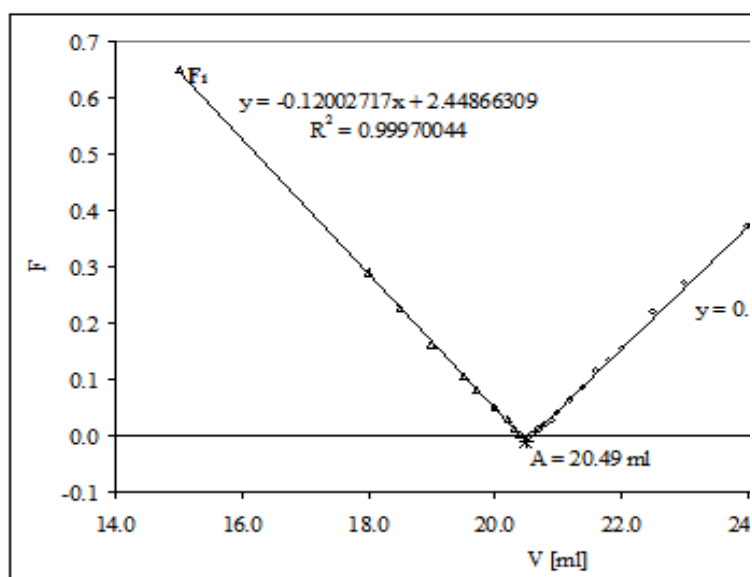
$$i_2 = (V_0 + V) \cdot 10^{(pH-14)}$$

Formace



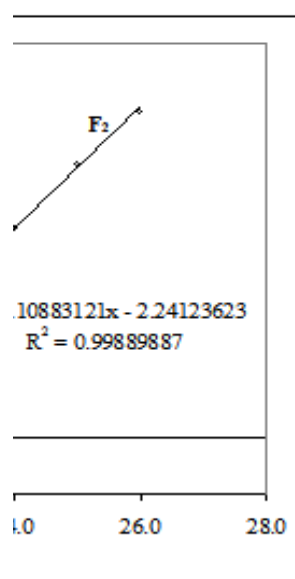
Tab.4: Výpočet Granovy linearizace titrační křivky

před bodem ekvivalence			za bodem ekvivalence	
V [ml]	π [V]	F ₁	V [ml]	π [V]
15.0	2.00	0.65000	20.6	9.3
18.0	2.37	0.29007	20.7	10.1
18.5	2.48	0.22682	20.8	10.4
19.0	2.63	0.16175	20.9	10.5
19.5	2.82	0.10519	21.0	10.7
19.7	2.93	0.08189	21.2	10.9
20.0	3.15	0.04956	21.4	11.0
20.2	3.37	0.02995	21.6	11.2
20.3	3.77	0.01194	21.8	11.2
20.4	4.49	0.00228	22.0	11.3
			22.5	11.4
			23.0	11.5
			24.0	11.7
			25.0	11.8
			26.0	11.8



Obr.5: Titrční křivka linearizovaná Granovou

kvivalence	
VJ	F ₂
8	0.00169
17	0.01046
43	0.01906
58	0.02696
76	0.04086
94	0.06201
07	0.08389
20	0.11348
27	0.13370
33	0.15393
48	0.21895
57	0.27122
70	0.37088
81	0.48424
88	0.57652



metodou

$$\chi^2 = \sum_{i=1}^r \sum_{j=1}^s \frac{(p_{ij} - o_{ij})^2}{o_{ij}}$$

Tabulka A.5

$\chi^2_{1-\alpha}(df)$
<i>df</i>
1
2
3
4
5
6
7
8
9
10
11
12
13
14

5: Kvantily $\chi^2_{1-\alpha}$ rozdělení

df stupních volnosti

α		
0,05	0,01	0,001
3,84	6,63	10,83
5,99	9,21	13,82
7,81	11,34	16,27
9,49	13,28	18,47
11,07	15,09	20,51
12,59	16,81	22,46
14,07	18,48	24,32
15,51	20,09	26,12
16,92	21,67	27,88
18,31	23,21	29,59
19,68	24,73	31,26
21,03	26,22	32,91
22,36	27,69	34,53
23,68	29,14	36,12

oučet

$$\chi^2 = \sum_{i=1}^r \sum_{j=1}^s \frac{(p_{ij} - o_{ij})^2}{o_{ij}}$$

oučet

Počet z předmět	předmět				
pohlaví	Bi	D	M	Tv	(Pi
dívka	16		11	9	9
chlapec	4		8	11	7
(Prázdné)					
Celkový součet	20		19	20	16

očekáváno	předmět				
pohlaví	Bi	D	M	Tv	
dívka	12.0		11.4	12.0	9.6
chlapec	8.0		7.6	8.0	6.4
Celkový součet	20		19	20	16

oučet

Funkce CHITEST					
p-hodnota=	0.1487085	>	0.05		
					dof= 3
Nebo vzorcem (poz-hyp)^2/hyp					
	1.3333333	0.0140351	0.75	0.0375	
	2	0.0210526	1.125	0.05625	
R=	5.3371711		Chikrit=	7.8147278	

Značka	Model	Najeto KM	Cena	Barva
Skoda	Favorit	200,000	30,000 Kč	Červená
Porsche	911	326,000	22,000 Kč	Žlutá
Fiat	Croma	318,500	27,000 Kč	Stříbrná
Fiat	Coupe	308,500	34,000 Kč	Stříbrná
Ford	Focus	302,000	39,000 Kč	Modrá
Citroen	Pluriel	294,500	44,000 Kč	Stříbrná
Citroen	Saxo	284,500	51,000 Kč	Stříbrná
Skoda	Octavia	278,000	56,000 Kč	Stříbrná
Skoda	Fabia	270,500	61,000 Kč	Modrá
Skoda	Fabia	260,500	68,000 Kč	Stříbrná
Fiat	Coupe	254,000	73,000 Kč	Červená
Alfa Romeo	146	242,500	90,000 Kč	Žlutá
Alfa Romeo	Spider	242,500	80,000 Kč	Stříbrná
Citroen	Pluriel	230,000	89,000 Kč	Stříbrná
Skoda	Fabia	206,000	106,000 Kč	Modrá
Renault	Laguna	189,500	118,000 Kč	Stříbrná
Peugeot	307	186,500	120,000 Kč	Stříbrná
Peugeot	307	186,500	120,000 Kč	Stříbrná
Fiat	Coupe	175,000	128,000 Kč	Modrá
Opel	Corsa	165,500	135,000 Kč	Červená
Opel	Corsa	162,500	137,000 Kč	Žlutá
Opel	Corsa	162,500	137,000 Kč	Stříbrná
Porsche	911	159,000	139,000 Kč	Stříbrná
Citroen	Saxo	151,000	145,000 Kč	Modrá
Peugeot	307	150,000	146,000 Kč	Stříbrná
Peugeot	307	142,000	151,000 Kč	Stříbrná
Ford	Escort	135,000	156,000 Kč	Stříbrná
Skoda	Felicia	127,000	162,000 Kč	Modrá
Opel	Zafira	126,000	162,000 Kč	Stříbrná
Opel	Corsa	118,000	168,000 Kč	Červená
Skoda	Octavia	111,000	173,000 Kč	Žlutá
Fiat	Coupe	110,000	174,000 Kč	Stříbrná
Fiat	Bravo	104,000	178,000 Kč	Stříbrná
Renault	Kangoo	98,000	182,000 Kč	Stříbrná
Peugeot	206	94,500	184,000 Kč	Modrá
Peugeot	206	94,500	184,000 Kč	Červená
Peugeot	307	94,500	184,000 Kč	Žlutá
Renault	Laguna	86,500	190,000 Kč	Stříbrná
Citroen	Saxo	86,000	190,000 Kč	Stříbrná
Citroen	Pluriel	85,500	191,000 Kč	Modrá
Renault	Kangoo	85,500	191,000 Kč	Stříbrná
Citroen	Pluriel	80,000	195,000 Kč	Stříbrná
Ford	Mondeo	74,000	199,000 Kč	Stříbrná
Opel	Zafira	70,500	201,000 Kč	Modrá
Opel	Zafira	70,500	201,000 Kč	Stříbrná
Opel	Zafira	70,500	201,000 Kč	Červená
Ford	Fiesta	62,500	207,000 Kč	Žlutá
Opel	Zafira	61,500	208,000 Kč	Stříbrná
Ford	Fiesta	61,500	208,000 Kč	Stříbrná

Renault	Kangoo	59,000	209,000 Kč	Modrá
Skoda	Fabia	56,000	211,000 Kč	Červená
Skoda	Octavia	50,000	216,000 Kč	Žlutá
Chrysler	Neon	42,500	120,000 Kč	Stříbrná
Skoda	Octavia	39,500	200,000 Kč	Stříbrná
Ford	Mondeo	35,000	226,000 Kč	Modrá
Alfa Romeo	156	30,000	300,000 Kč	Stříbrná
Alfa Romeo	156	22,500	280,000 Kč	Stříbrná
Skoda	Octavia	11,000	243,000 Kč	Stříbrná
Citroen	Pluriel	126,000	196,000 Kč	Modrá
Citroen	Saxo	118,000	191,000 Kč	Stříbrná
Skoda	Octavia	111,000	195,000 Kč	Červená
Skoda	Fabia	110,000	199,000 Kč	Žlutá
Skoda	Fabia	104,000	201,000 Kč	Stříbrná
Fiat	Coupe	98,000	201,000 Kč	Stříbrná
Alfa Romeo	146	94,500	201,000 Kč	Modrá
Alfa Romeo	Spider	94,500	207,000 Kč	Stříbrná
Citroen	Pluriel	94,500	208,000 Kč	Stříbrná
Skoda	Fabia	86,500	208,000 Kč	Stříbrná
Renault	Laguna	86,000	209,000 Kč	Modrá
Peugeot	307	85,500	211,000 Kč	Červená
Peugeot	307	85,500	216,000 Kč	Žlutá
Fiat	Coupe	80,000	120,000 Kč	Stříbrná
Opel	Corsa	74,000	200,000 Kč	Stříbrná
Opel	Corsa	70,500	226,000 Kč	Modrá
Opel	Corsa	70,500	300,000 Kč	Stříbrná
Porsche	911	70,500	280,000 Kč	Stříbrná
Citroen	Saxo	62,500	243,000 Kč	Stříbrná
Peugeot	307	61,500	180,000 Kč	Modrá
Peugeot	307	61,500	184,000 Kč	Stříbrná
Ford	Escort	59,000	188,000 Kč	Červená
Skoda	Felicia	70,500	190,000 Kč	Žlutá
Opel	Zafira	70,500	190,000 Kč	Stříbrná
Opel	Corsa	70,500	190,000 Kč	Červená
Skoda	Octavia	62,500	196,000 Kč	Žlutá
Fiat	Coupe	61,500	197,000 Kč	Stříbrná
Fiat	Bravo	104,000	197,000 Kč	Stříbrná
Renault	Kangoo	70,000	198,000 Kč	Modrá
Skoda	Fabia	62,500	200,000 Kč	Stříbrná
Skoda	Octavia	59,500	205,000 Kč	Stříbrná
Chrysler	Neon	55,000	109,000 Kč	Stříbrná
Skoda	Octavia	50,000	189,000 Kč	Modrá
Ford	Mondeo	42,500	215,000 Kč	Stříbrná
Alfa Romeo	156	31,000	289,000 Kč	Červená
Alfa Romeo	156	146,000	269,000 Kč	Žlutá
Skoda	Octavia	138,000	232,000 Kč	Stříbrná
Citroen	Pluriel	131,000	185,000 Kč	Stříbrná
Citroen	Saxo	130,000	180,000 Kč	Modrá
Skoda	Octavia	124,000	184,000 Kč	Stříbrná
Skoda	Fabia	118,000	188,000 Kč	Stříbrná

Skoda	Fabia	114,500	190,000 Kč	Stříbrná
Fiat	Coupe	114,500	190,000 Kč	Modrá
Alfa Romeo	146	114,500	190,000 Kč	Červená
Alfa Romeo	Spider	106,500	196,000 Kč	Žlutá
Citroen	Pluriel	106,000	197,000 Kč	Stříbrná
Skoda	Fabia	105,500	197,000 Kč	Stříbrná
Renault	Laguna	105,500	198,000 Kč	Modrá
Fiat	Coupe	100,000	200,000 Kč	Stříbrná
Alfa Romeo	146	94,000	205,000 Kč	Stříbrná
Alfa Romeo	Spider	90,500	109,000 Kč	Stříbrná
Citroen	Pluriel	90,500	189,000 Kč	Modrá
Skoda	Fabia	90,500	215,000 Kč	Stříbrná
Renault	Laguna	82,500	289,000 Kč	Červená
Peugeot	307	81,500	269,000 Kč	Žlutá
Peugeot	307	81,500	232,000 Kč	Stříbrná
Fiat	Coupe	79,000	169,000 Kč	Stříbrná
Opel	Corsa	90,500	173,000 Kč	Stříbrná
Opel	Corsa	90,500	177,000 Kč	Modrá
Opel	Corsa	90,500	179,000 Kč	Červená
Porsche	911	82,500	179,000 Kč	Stříbrná
Citroen	Saxo	81,500	179,000 Kč	Modrá
Peugeot	307	124,000	185,000 Kč	Stříbrná
Peugeot	307	90,000	186,000 Kč	Stříbrná
Ford	Escort	82,500	186,000 Kč	Stříbrná
Skoda	Felicia	79,500	187,000 Kč	Modrá
Opel	Zafira	75,000	189,000 Kč	Stříbrná
Opel	Corsa	70,000	194,000 Kč	Červená
Skoda	Octavia	62,500	98,000 Kč	Žlutá
Fiat	Coupe	51,000	178,000 Kč	Stříbrná
Fiat	Bravo	166,000	204,000 Kč	Stříbrná
Renault	Kangoo	158,000	278,000 Kč	Modrá
Alfa Romeo	Spider	151,000	258,000 Kč	Stříbrná
Citroen	Pluriel	150,000	221,000 Kč	Stříbrná
Skoda	Fabia	144,000	174,000 Kč	Stříbrná
Renault	Laguna	138,000	169,000 Kč	Modrá
Fiat	Coupe	134,500	173,000 Kč	Červená
Alfa Romeo	146	134,500	177,000 Kč	Žlutá
Alfa Romeo	Spider	134,500	179,000 Kč	Stříbrná
Citroen	Pluriel	126,500	179,000 Kč	Stříbrná
Skoda	Fabia	126,000	179,000 Kč	Modrá
Renault	Laguna	125,500	185,000 Kč	Stříbrná
Peugeot	307	125,500	186,000 Kč	Stříbrná
Peugeot	307	120,000	186,000 Kč	Stříbrná
Fiat	Coupe	97,000	187,000 Kč	Modrá
Opel	Corsa	96,000	189,000 Kč	Stříbrná
Opel	Corsa	90,000	194,000 Kč	Červená
Opel	Corsa	84,000	98,000 Kč	Žlutá
Porsche	911	80,500	178,000 Kč	Stříbrná
Citroen	Saxo	80,500	204,000 Kč	Červená
Peugeot	307	80,500	278,000 Kč	Žlutá

Peugeot	307	72,500	258,000 Kč	Stříbrná
Ford	Escort	72,000	221,000 Kč	Stříbrná
Skoda	Felicia	71,500	158,000 Kč	Modrá
Opel	Zafira	71,500	162,000 Kč	Stříbrná
Skoda	Octavia	66,000	166,000 Kč	Stříbrná
Citroen	Pluriel	60,000	168,000 Kč	Stříbrná
Citroen	Saxo	56,500	168,000 Kč	Modrá
Skoda	Octavia	56,500	168,000 Kč	Stříbrná
Skoda	Fabia	56,500	174,000 Kč	Červená
Skoda	Fabia	48,500	175,000 Kč	Žlutá
Fiat	Coupe	47,500	175,000 Kč	Stříbrná
Alfa Romeo	146	47,500	176,000 Kč	Stříbrná
Alfa Romeo	Spider	45,000	178,000 Kč	Modrá
Citroen	Pluriel	56,500	183,000 Kč	Stříbrná
Skoda	Fabia	56,500	87,000 Kč	Stříbrná
Renault	Laguna	56,500	167,000 Kč	Modrá
Fiat	Coupe	48,500	193,000 Kč	Stříbrná
Alfa Romeo	146	47,500	267,000 Kč	Stříbrná
Alfa Romeo	Spider	90,000	247,000 Kč	Stříbrná
Citroen	Pluriel	56,000	210,000 Kč	Modrá
Skoda	Fabia	48,500	163,000 Kč	Stříbrná
Renault	Laguna	45,500	158,000 Kč	Červená
Peugeot	307	41,000	162,000 Kč	Žlutá
Peugeot	307	36,000	166,000 Kč	Stříbrná
Fiat	Coupe	28,500	168,000 Kč	Stříbrná
Opel	Corsa	17,000	168,000 Kč	Modrá
Opel	Corsa	132,000	168,000 Kč	Stříbrná
Opel	Corsa	124,000	174,000 Kč	Stříbrná
Porsche	911	117,000	175,000 Kč	Stříbrná
Citroen	Saxo	116,000	175,000 Kč	Modrá
Opel	Corsa	110,000	176,000 Kč	Červená
Opel	Corsa	104,000	178,000 Kč	Žlutá
Porsche	911	100,500	183,000 Kč	Stříbrná
Citroen	Saxo	100,500	87,000 Kč	Stříbrná
Peugeot	307	100,500	167,000 Kč	Modrá
Peugeot	307	92,500	193,000 Kč	Stříbrná
Ford	Escort	92,000	267,000 Kč	Stříbrná
Skoda	Felicia	91,500	247,000 Kč	Stříbrná
Opel	Zafira	91,500	210,000 Kč	Modrá
Opel	Corsa	86,000	147,000 Kč	Stříbrná
Skoda	Octavia	80,000	151,000 Kč	Červená
Fiat	Coupe	76,500	155,000 Kč	Žlutá
Fiat	Bravo	76,500	157,000 Kč	Stříbrná
Renault	Kangoo	76,500	157,000 Kč	Červená
Skoda	Fabia	68,500	157,000 Kč	Žlutá
Skoda	Octavia	67,500	163,000 Kč	Stříbrná
Chrysler	Neon	67,500	164,000 Kč	Stříbrná
Skoda	Octavia	65,000	164,000 Kč	Modrá
Ford	Scorpio	76,500	165,000 Kč	Stříbrná
Alfa Romeo	156	76,500	167,000 Kč	Stříbrná

Dodge	Viper	77,000	123,000 Kč	Stříbrná
Skoda	Favorit	200,000	40,000 Kč	Modrá
Porsche	911	326,000	22,000 Kč	Stříbrná
Fiat	Croma	318,500	27,000 Kč	Červená
Fiat	Coupe	308,500	34,000 Kč	Žlutá
Ford	Focus	302,000	39,000 Kč	Stříbrná
Citroen	Pluriel	294,500	44,000 Kč	Stříbrná
Citroen	Saxo	284,500	51,000 Kč	Modrá
Skoda	Octavia	278,000	56,000 Kč	Stříbrná
Skoda	Fabia	270,500	61,000 Kč	Stříbrná
Skoda	Fabia	260,500	68,000 Kč	Modrá
Fiat	Coupe	254,000	73,000 Kč	Stříbrná
Alfa Romeo	146	242,500	90,000 Kč	Stříbrná
Alfa Romeo	Spider	242,500	80,000 Kč	Stříbrná
Citroen	Pluriel	230,000	89,000 Kč	Modrá
Skoda	Fabia	206,000	106,000 Kč	Stříbrná
Renault	Laguna	189,500	118,000 Kč	Červená
Peugeot	307	186,500	120,000 Kč	Žlutá
Peugeot	307	186,500	120,000 Kč	Stříbrná
Fiat	Coupe	175,000	128,000 Kč	Stříbrná
Opel	Corsa	165,500	135,000 Kč	Modrá
Opel	Corsa	162,500	137,000 Kč	Stříbrná
Opel	Corsa	162,500	137,000 Kč	Stříbrná
Porsche	911	159,000	139,000 Kč	Stříbrná
Citroen	Saxo	151,000	145,000 Kč	Modrá
Peugeot	307	150,000	146,000 Kč	Modrá
Peugeot	307	142,000	151,000 Kč	Stříbrná
Ford	Escort	135,000	156,000 Kč	Stříbrná
Skoda	Felicia	127,000	162,000 Kč	Modrá
Opel	Zafira	126,000	162,000 Kč	Stříbrná
Opel	Corsa	118,000	168,000 Kč	Stříbrná
Skoda	Octavia	111,000	173,000 Kč	Stříbrná
Fiat	Coupe	110,000	174,000 Kč	Modrá
Fiat	Bravo	104,000	178,000 Kč	Stříbrná
Renault	Kangoo	98,000	182,000 Kč	Červená
Peugeot	206	94,500	184,000 Kč	Žlutá
Peugeot	206	94,500	184,000 Kč	Stříbrná
Peugeot	307	94,500	184,000 Kč	Žlutá
Renault	Laguna	86,500	190,000 Kč	Stříbrná
Citroen	Saxo	86,000	190,000 Kč	Červená
Citroen	Pluriel	85,500	191,000 Kč	Žlutá
Renault	Kangoo	85,500	191,000 Kč	Stříbrná
Citroen	Pluriel	80,000	195,000 Kč	Stříbrná
Ford	Mondeo	74,000	199,000 Kč	Modrá
Opel	Zafira	70,500	201,000 Kč	Stříbrná
Opel	Zafira	70,500	201,000 Kč	Stříbrná
Opel	Zafira	70,500	201,000 Kč	Stříbrná
Ford	Fiesta	62,500	207,000 Kč	Modrá
Opel	Zafira	61,500	208,000 Kč	Stříbrná
Ford	Fiesta	61,500	208,000 Kč	Červená

Renault	Kangoo	59,000	209,000 Kč	Žlutá
Skoda	Fabia	56,000	211,000 Kč	Stříbrná
Skoda	Octavia	50,000	216,000 Kč	Stříbrná
Chrysler	Neon	42,500	120,000 Kč	Modrá
Skoda	Octavia	39,500	200,000 Kč	Stříbrná
Ford	Mondeo	35,000	226,000 Kč	Stříbrná
Alfa Romeo	156	30,000	300,000 Kč	Modrá
Alfa Romeo	156	22,500	280,000 Kč	Stříbrná
Skoda	Octavia	11,000	243,000 Kč	Stříbrná



Značka	Model	Najeto KM	Cena	Barva
Skoda	Favorit	200,000	30,000 Kč	Červená
Porsche	911	326,000	22,000 Kč	Žlutá
Fiat	Croma	318,500	27,000 Kč	Stříbrná
Fiat	Coupe	308,500	34,000 Kč	Stříbrná
Ford	Focus	302,000	39,000 Kč	Modrá
Citroen	Pluriel	294,500	44,000 Kč	Stříbrná
Citroen	Saxo	284,500	51,000 Kč	Stříbrná
Skoda	Octavia	278,000	56,000 Kč	Stříbrná
Skoda	Fabia	270,500	61,000 Kč	Modrá
Skoda	Fabia	260,500	68,000 Kč	Stříbrná
Fiat	Coupe	254,000	73,000 Kč	Červená
Alfa Romeo	146	242,500	90,000 Kč	Žlutá
Alfa Romeo	Spider	242,500	80,000 Kč	Stříbrná
Citroen	Pluriel	230,000	89,000 Kč	Stříbrná
Skoda	Fabia	206,000	106,000 Kč	Modrá
Renault	Laguna	189,500	118,000 Kč	Stříbrná
Peugeot	307	186,500	120,000 Kč	Stříbrná
Peugeot	307	186,500	120,000 Kč	Stříbrná
Fiat	Coupe	175,000	128,000 Kč	Modrá
Opel	Corsa	165,500	135,000 Kč	Červená
Opel	Corsa	162,500	137,000 Kč	Žlutá
Opel	Corsa	162,500	137,000 Kč	Stříbrná
Porsche	911	159,000	139,000 Kč	Stříbrná
Citroen	Saxo	151,000	145,000 Kč	Modrá
Peugeot	307	150,000	146,000 Kč	Stříbrná
Peugeot	307	142,000	151,000 Kč	Stříbrná
Ford	Escort	135,000	156,000 Kč	Stříbrná
Skoda	Felicia	127,000	162,000 Kč	Modrá
Opel	Zafira	126,000	162,000 Kč	Stříbrná
Opel	Corsa	118,000	168,000 Kč	Červená
Skoda	Octavia	111,000	173,000 Kč	Žlutá
Fiat	Coupe	110,000	174,000 Kč	Stříbrná
Fiat	Bravo	104,000	178,000 Kč	Stříbrná
Renault	Kangoo	98,000	182,000 Kč	Stříbrná
Peugeot	206	94,500	184,000 Kč	Modrá
Peugeot	206	94,500	184,000 Kč	Červená
Peugeot	307	94,500	184,000 Kč	Žlutá
Renault	Laguna	86,500	190,000 Kč	Stříbrná
Citroen	Saxo	86,000	190,000 Kč	Stříbrná
Citroen	Pluriel	85,500	191,000 Kč	Modrá
Renault	Kangoo	85,500	191,000 Kč	Stříbrná
Citroen	Pluriel	80,000	195,000 Kč	Stříbrná
Ford	Mondeo	74,000	199,000 Kč	Stříbrná
Opel	Zafira	70,500	201,000 Kč	Modrá
Opel	Zafira	70,500	201,000 Kč	Stříbrná
Opel	Zafira	70,500	201,000 Kč	Červená
Ford	Fiesta	62,500	207,000 Kč	Žlutá
Opel	Zafira	61,500	208,000 Kč	Stříbrná
Ford	Fiesta	61,500	208,000 Kč	Stříbrná

Renault	Kangoo	59,000	209,000 Kč	Modrá
Skoda	Fabia	56,000	211,000 Kč	Červená
Skoda	Octavia	50,000	216,000 Kč	Žlutá
Chrysler	Neon	42,500	120,000 Kč	Stříbrná
Skoda	Octavia	39,500	200,000 Kč	Stříbrná
Ford	Mondeo	35,000	226,000 Kč	Modrá
Alfa Romeo	156	30,000	300,000 Kč	Stříbrná
Alfa Romeo	156	22,500	280,000 Kč	Stříbrná
Skoda	Octavia	11,000	243,000 Kč	Stříbrná
Citroen	Pluriel	126,000	196,000 Kč	Modrá
Citroen	Saxo	118,000	191,000 Kč	Stříbrná
Skoda	Octavia	111,000	195,000 Kč	Červená
Skoda	Fabia	110,000	199,000 Kč	Žlutá
Skoda	Fabia	104,000	201,000 Kč	Stříbrná
Fiat	Coupe	98,000	201,000 Kč	Stříbrná
Alfa Romeo	146	94,500	201,000 Kč	Modrá
Alfa Romeo	Spider	94,500	207,000 Kč	Stříbrná
Citroen	Pluriel	94,500	208,000 Kč	Stříbrná
Skoda	Fabia	86,500	208,000 Kč	Stříbrná
Renault	Laguna	86,000	209,000 Kč	Modrá
Peugeot	307	85,500	211,000 Kč	Červená
Peugeot	307	85,500	216,000 Kč	Žlutá
Fiat	Coupe	80,000	120,000 Kč	Stříbrná
Opel	Corsa	74,000	200,000 Kč	Stříbrná
Opel	Corsa	70,500	226,000 Kč	Modrá
Opel	Corsa	70,500	300,000 Kč	Stříbrná
Porsche	911	70,500	280,000 Kč	Stříbrná
Citroen	Saxo	62,500	243,000 Kč	Stříbrná
Peugeot	307	61,500	180,000 Kč	Modrá
Peugeot	307	61,500	184,000 Kč	Stříbrná
Ford	Escort	59,000	188,000 Kč	Červená
Skoda	Felicia	70,500	190,000 Kč	Žlutá
Opel	Zafira	70,500	190,000 Kč	Stříbrná
Opel	Corsa	70,500	190,000 Kč	Červená
Skoda	Octavia	62,500	196,000 Kč	Žlutá
Fiat	Coupe	61,500	197,000 Kč	Stříbrná
Fiat	Bravo	104,000	197,000 Kč	Stříbrná
Renault	Kangoo	70,000	198,000 Kč	Modrá
Skoda	Fabia	62,500	200,000 Kč	Stříbrná
Skoda	Octavia	59,500	205,000 Kč	Stříbrná
Chrysler	Neon	55,000	109,000 Kč	Stříbrná
Skoda	Octavia	50,000	189,000 Kč	Modrá
Ford	Mondeo	42,500	215,000 Kč	Stříbrná
Alfa Romeo	156	31,000	289,000 Kč	Červená
Alfa Romeo	156	146,000	269,000 Kč	Žlutá
Skoda	Octavia	138,000	232,000 Kč	Stříbrná
Citroen	Pluriel	131,000	185,000 Kč	Stříbrná
Citroen	Saxo	130,000	180,000 Kč	Modrá
Skoda	Octavia	124,000	184,000 Kč	Stříbrná
Skoda	Fabia	118,000	188,000 Kč	Stříbrná

Skoda	Fabia	114,500	190,000 Kč	Stříbrná
Fiat	Coupe	114,500	190,000 Kč	Modrá
Alfa Romeo	146	114,500	190,000 Kč	Červená
Alfa Romeo	Spider	106,500	196,000 Kč	Žlutá
Citroen	Pluriel	106,000	197,000 Kč	Stříbrná
Skoda	Fabia	105,500	197,000 Kč	Stříbrná
Renault	Laguna	105,500	198,000 Kč	Modrá
Fiat	Coupe	100,000	200,000 Kč	Stříbrná
Alfa Romeo	146	94,000	205,000 Kč	Stříbrná
Alfa Romeo	Spider	90,500	109,000 Kč	Stříbrná
Citroen	Pluriel	90,500	189,000 Kč	Modrá
Skoda	Fabia	90,500	215,000 Kč	Stříbrná
Renault	Laguna	82,500	289,000 Kč	Červená
Peugeot	307	81,500	269,000 Kč	Žlutá
Peugeot	307	81,500	232,000 Kč	Stříbrná
Fiat	Coupe	79,000	169,000 Kč	Stříbrná
Opel	Corsa	90,500	173,000 Kč	Stříbrná
Opel	Corsa	90,500	177,000 Kč	Modrá
Opel	Corsa	90,500	179,000 Kč	Červená
Porsche	911	82,500	179,000 Kč	Stříbrná
Citroen	Saxo	81,500	179,000 Kč	Modrá
Peugeot	307	124,000	185,000 Kč	Stříbrná
Peugeot	307	90,000	186,000 Kč	Stříbrná
Ford	Escort	82,500	186,000 Kč	Stříbrná
Skoda	Felicia	79,500	187,000 Kč	Modrá
Opel	Zafira	75,000	189,000 Kč	Stříbrná
Opel	Corsa	70,000	194,000 Kč	Červená
Skoda	Octavia	62,500	98,000 Kč	Žlutá
Fiat	Coupe	51,000	178,000 Kč	Stříbrná
Fiat	Bravo	166,000	204,000 Kč	Stříbrná
Renault	Kangoo	158,000	278,000 Kč	Modrá
Alfa Romeo	Spider	151,000	258,000 Kč	Stříbrná
Citroen	Pluriel	150,000	221,000 Kč	Stříbrná
Skoda	Fabia	144,000	174,000 Kč	Stříbrná
Renault	Laguna	138,000	169,000 Kč	Modrá
Fiat	Coupe	134,500	173,000 Kč	Červená
Alfa Romeo	146	134,500	177,000 Kč	Žlutá
Alfa Romeo	Spider	134,500	179,000 Kč	Stříbrná
Citroen	Pluriel	126,500	179,000 Kč	Stříbrná
Skoda	Fabia	126,000	179,000 Kč	Modrá
Renault	Laguna	125,500	185,000 Kč	Stříbrná
Peugeot	307	125,500	186,000 Kč	Stříbrná
Peugeot	307	120,000	186,000 Kč	Stříbrná
Fiat	Coupe	97,000	187,000 Kč	Modrá
Opel	Corsa	96,000	189,000 Kč	Stříbrná
Opel	Corsa	90,000	194,000 Kč	Červená
Opel	Corsa	84,000	98,000 Kč	Žlutá
Porsche	911	80,500	178,000 Kč	Stříbrná
Citroen	Saxo	80,500	204,000 Kč	Červená
Peugeot	307	80,500	278,000 Kč	Žlutá

Peugeot	307	72,500	258,000 Kč	Stříbrná
Ford	Escort	72,000	221,000 Kč	Stříbrná
Skoda	Felicia	71,500	158,000 Kč	Modrá
Opel	Zafira	71,500	162,000 Kč	Stříbrná
Skoda	Octavia	66,000	166,000 Kč	Stříbrná
Citroen	Pluriel	60,000	168,000 Kč	Stříbrná
Citroen	Saxo	56,500	168,000 Kč	Modrá
Skoda	Octavia	56,500	168,000 Kč	Stříbrná
Skoda	Fabia	56,500	174,000 Kč	Červená
Skoda	Fabia	48,500	175,000 Kč	Žlutá
Fiat	Coupe	47,500	175,000 Kč	Stříbrná
Alfa Romeo	146	47,500	176,000 Kč	Stříbrná
Alfa Romeo	Spider	45,000	178,000 Kč	Modrá
Citroen	Pluriel	56,500	183,000 Kč	Stříbrná
Skoda	Fabia	56,500	87,000 Kč	Stříbrná
Renault	Laguna	56,500	167,000 Kč	Modrá
Fiat	Coupe	48,500	193,000 Kč	Stříbrná
Alfa Romeo	146	47,500	267,000 Kč	Stříbrná
Alfa Romeo	Spider	90,000	247,000 Kč	Stříbrná
Citroen	Pluriel	56,000	210,000 Kč	Modrá
Skoda	Fabia	48,500	163,000 Kč	Stříbrná
Renault	Laguna	45,500	158,000 Kč	Červená
Peugeot	307	41,000	162,000 Kč	Žlutá
Peugeot	307	36,000	166,000 Kč	Stříbrná
Fiat	Coupe	28,500	168,000 Kč	Stříbrná
Opel	Corsa	17,000	168,000 Kč	Modrá
Opel	Corsa	132,000	168,000 Kč	Stříbrná
Opel	Corsa	124,000	174,000 Kč	Stříbrná
Porsche	911	117,000	175,000 Kč	Stříbrná
Citroen	Saxo	116,000	175,000 Kč	Modrá
Opel	Corsa	110,000	176,000 Kč	Červená
Opel	Corsa	104,000	178,000 Kč	Žlutá
Porsche	911	100,500	183,000 Kč	Stříbrná
Citroen	Saxo	100,500	87,000 Kč	Stříbrná
Peugeot	307	100,500	167,000 Kč	Modrá
Peugeot	307	92,500	193,000 Kč	Stříbrná
Ford	Escort	92,000	267,000 Kč	Stříbrná
Skoda	Felicia	91,500	247,000 Kč	Stříbrná
Opel	Zafira	91,500	210,000 Kč	Modrá
Opel	Corsa	86,000	147,000 Kč	Stříbrná
Skoda	Octavia	80,000	151,000 Kč	Červená
Fiat	Coupe	76,500	155,000 Kč	Žlutá
Fiat	Bravo	76,500	157,000 Kč	Stříbrná
Renault	Kangoo	76,500	157,000 Kč	Červená
Skoda	Fabia	68,500	157,000 Kč	Žlutá
Skoda	Octavia	67,500	163,000 Kč	Stříbrná
Chrysler	Neon	67,500	164,000 Kč	Stříbrná
Skoda	Octavia	65,000	164,000 Kč	Modrá
Ford	Scorpio	76,500	165,000 Kč	Stříbrná
Alfa Romeo	156	76,500	167,000 Kč	Stříbrná

Dodge	Viper	77,000	123,000 Kč	Stříbrná
Skoda	Favorit	200,000	40,000 Kč	Modrá
Porsche	911	326,000	22,000 Kč	Stříbrná
Fiat	Croma	318,500	27,000 Kč	Červená
Fiat	Coupe	308,500	34,000 Kč	Žlutá
Ford	Focus	302,000	39,000 Kč	Stříbrná
Citroen	Pluriel	294,500	44,000 Kč	Stříbrná
Citroen	Saxo	284,500	51,000 Kč	Modrá
Skoda	Octavia	278,000	56,000 Kč	Stříbrná
Skoda	Fabia	270,500	61,000 Kč	Stříbrná
Skoda	Fabia	260,500	68,000 Kč	Modrá
Fiat	Coupe	254,000	73,000 Kč	Stříbrná
Alfa Romeo	146	242,500	90,000 Kč	Stříbrná
Alfa Romeo	Spider	242,500	80,000 Kč	Stříbrná
Citroen	Pluriel	230,000	89,000 Kč	Modrá
Skoda	Fabia	206,000	106,000 Kč	Stříbrná
Renault	Laguna	189,500	118,000 Kč	Červená
Peugeot	307	186,500	120,000 Kč	Žlutá
Peugeot	307	186,500	120,000 Kč	Stříbrná
Fiat	Coupe	175,000	128,000 Kč	Stříbrná
Opel	Corsa	165,500	135,000 Kč	Modrá
Opel	Corsa	162,500	137,000 Kč	Stříbrná
Opel	Corsa	162,500	137,000 Kč	Stříbrná
Porsche	911	159,000	139,000 Kč	Stříbrná
Citroen	Saxo	151,000	145,000 Kč	Modrá
Peugeot	307	150,000	146,000 Kč	Modrá
Peugeot	307	142,000	151,000 Kč	Stříbrná
Ford	Escort	135,000	156,000 Kč	Stříbrná
Skoda	Felicia	127,000	162,000 Kč	Modrá
Opel	Zafira	126,000	162,000 Kč	Stříbrná
Opel	Corsa	118,000	168,000 Kč	Stříbrná
Skoda	Octavia	111,000	173,000 Kč	Stříbrná
Fiat	Coupe	110,000	174,000 Kč	Modrá
Fiat	Bravo	104,000	178,000 Kč	Stříbrná
Renault	Kangoo	98,000	182,000 Kč	Červená
Peugeot	206	94,500	184,000 Kč	Žlutá
Peugeot	206	94,500	184,000 Kč	Stříbrná
Peugeot	307	94,500	184,000 Kč	Žlutá
Renault	Laguna	86,500	190,000 Kč	Stříbrná
Citroen	Saxo	86,000	190,000 Kč	Červená
Citroen	Pluriel	85,500	191,000 Kč	Žlutá
Renault	Kangoo	85,500	191,000 Kč	Stříbrná
Citroen	Pluriel	80,000	195,000 Kč	Stříbrná
Ford	Mondeo	74,000	199,000 Kč	Modrá
Opel	Zafira	70,500	201,000 Kč	Stříbrná
Opel	Zafira	70,500	201,000 Kč	Stříbrná
Opel	Zafira	70,500	201,000 Kč	Stříbrná
Ford	Fiesta	62,500	207,000 Kč	Modrá
Opel	Zafira	61,500	208,000 Kč	Stříbrná
Ford	Fiesta	61,500	208,000 Kč	Červená

Renault	Kangoo	59,000	209,000 Kč	Žlutá
Skoda	Fabia	56,000	211,000 Kč	Stříbrná
Skoda	Octavia	50,000	216,000 Kč	Stříbrná
Chrysler	Neon	42,500	120,000 Kč	Modrá
Skoda	Octavia	39,500	200,000 Kč	Stříbrná
Ford	Mondeo	35,000	226,000 Kč	Stříbrná
Alfa Romeo	156	30,000	300,000 Kč	Modrá
Alfa Romeo	156	22,500	280,000 Kč	Stříbrná
Skoda	Octavia	11,000	243,000 Kč	Stříbrná

Popisky řádků	Součet z Cena
Alfa Romeo	4815000
Citroen	5173000
Dodge	123000
Fiat	4092000
Ford	3312000
Chrysler	513000
Opel	6982000
Peugeot	5437000
Porsche	1317000
Renault	3788000
Skoda	8662000
Celkový součet	44214000



Počet z Značka Popisky řádků	Popisky sloupců				Celkový součet
	Červená	Modrá	Stříbrná	Žlutá	
Alfa Romeo	2	3	15	4	24
Citroen	2	12	17	1	32
Dodge			1		1
Fiat	3	4	19	2	28
Ford	2	4	11	1	18
Chrysler		1	3		4
Opel	8	6	22	3	39
Peugeot	2	4	16	8	30
Porsche			8	1	9
Renault	5	7	7	1	20
Skoda	5	11	29	8	53
Celkový součet	29	52	148	29	258

čtyřpolní tabulky

	praváci	leváci	celkem
muži	41	9	
ženy	46	4	
celkem			

$$\chi^2 = n \frac{(ad - bc)^2}{(a+b)(a+c)(c+d)(b+d)}$$

$$\frac{c^2}{(b+d)(b+d)}$$

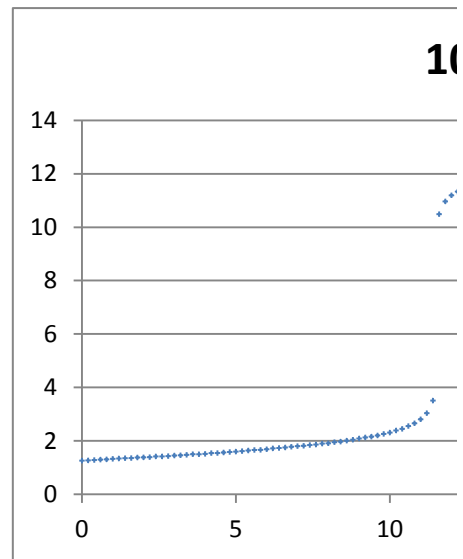
čtyřpolní tabulky

	praváci	leváci	celkem
muži	41	9	50
ženy	46	4	50
celkem	87	13	100

$$\chi^2 = n \frac{(ad - bc)^2}{(a+b)(a+c)(c+d)(b+d)}$$

chi2= **2.210433** < **3.841459** krit.

$$\frac{c^2}{(b+d)(b+d)}$$



0	1.26209
0.2	1.271139
0.4	1.284685
0.6	1.300933
0.8	1.309789
1	1.32996
1.2	1.342153
1.4	1.353273
1.6	1.358428
1.8	1.379426
2	1.384575
2.2	1.391882
2.4	1.419458
2.6	1.419612
2.8	1.431353
3	1.453393

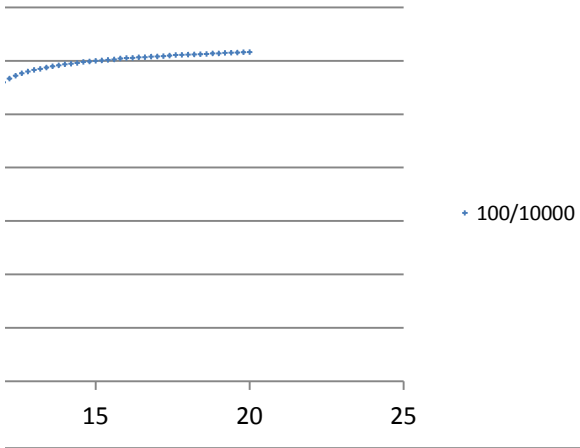
3.2	1.461843
3.4	1.479515
3.6	1.502323
3.8	1.500679
4	1.515601
4.2	1.543803
4.4	1.545903
4.6	1.567121
4.8	1.585377
5	1.600394
5.2	1.618197
5.4	1.640912
5.6	1.660868
5.8	1.6648
6	1.687741
6.2	1.720634
6.4	1.735222
6.6	1.754754
6.8	1.781488
7	1.804886
7.2	1.818021
7.4	1.845774
7.6	1.864841
7.8	1.901029
8	1.911467
8.2	1.952805
8.4	1.97372
8.6	2.010027
8.8	2.045084
9	2.091211
9.2	2.129907
9.4	2.16068
9.6	2.204292
9.8	2.262424
10	2.31189
10.2	2.390428
10.4	2.451852
10.6	2.556357
10.8	2.659939
11	2.809087
11.2	3.038539
11.4	3.510146
11.6	10.48733
11.8	10.96471
12	11.19203
12.2	11.33175
12.4	11.4409
12.6	11.53128
12.8	11.59637
13	11.65767
13.2	11.696
13.4	11.746
13.6	11.79207
13.8	11.82809
14	11.86764
14.2	11.88892
14.4	11.91611
14.6	11.95656
14.8	11.9735

HAHNOVA METODA

$$V_{eq} = V_1 - pH''_1 \cdot]$$

15	11.99737
15.2	12.01242
15.4	12.03202
15.6	12.04859
15.8	12.08514
16	12.10327
16.2	12.10784
16.4	12.12895
16.6	12.13234
16.8	12.15517
17	12.1607
17.2	12.17227
17.4	12.19352
17.6	12.21548
17.8	12.22068
18	12.22996
18.2	12.23634
18.4	12.24455
18.6	12.2533
18.8	12.27412
19	12.27462
19.2	12.29442
19.4	12.30205
19.6	12.30661
19.8	12.31981
20	12.32497

00/10000



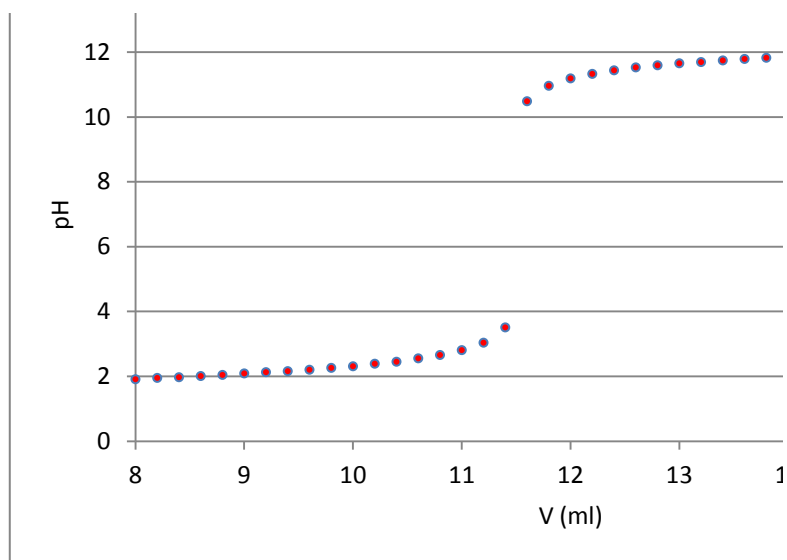
$$\frac{V_2 - V_1}{\text{pH}''_2 - \text{pH}''_1}$$

x 100/10000

NaOH(ml)	pH
0	1.26209
0.2	1.271139
0.4	1.284685
0.6	1.300933
0.8	1.309789
1	1.32996
1.2	1.342153
1.4	1.353273
1.6	1.358428
1.8	1.379426
2	1.384575
2.2	1.391882
2.4	1.419458
2.6	1.419612
2.8	1.431353
3	1.453393

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3.2	1.461843
3.4	1.479515
3.6	1.502323
3.8	1.500679
4	1.515601
4.2	1.543803
4.4	1.545903
4.6	1.567121
4.8	1.585377
5	1.600394
5.2	1.618197
5.4	1.640912
5.6	1.660868
5.8	1.6648
6	1.687741
6.2	1.720634
6.4	1.735222
6.6	1.754754
6.8	1.781488
7	1.804886
7.2	1.818021
7.4	1.845774
7.6	1.864841
7.8	1.901029
8	1.911467
8.2	1.952805
8.4	1.97372
8.6	2.010027
8.8	2.045084
9	2.091211
9.2	2.129907
9.4	2.16068
9.6	2.204292
9.8	2.262424
10	2.31189
10.2	2.390428
10.4	2.451852
10.6	2.556357
10.8	2.659939
11	2.809087
11.2	3.038539
11.4	3.510146
11.6	10.48733
11.8	10.96471
12	11.19203
12.2	11.33175
12.4	11.4409
12.6	11.53128
12.8	11.59637
13	11.65767
13.2	11.696
13.4	11.746
13.6	11.79207
13.8	11.82809
14	11.86764
14.2	11.88892
14.4	11.91611
14.6	11.95656
14.8	11.9735

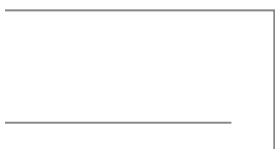


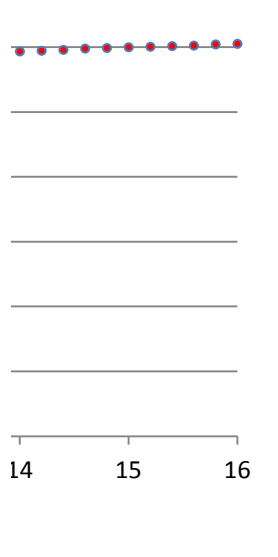
HAHNOVA METODA

$$V_{eq} = V_1 - pH''_1 \frac{V_2 - pH''_2 - pH''_1}{pH''_2 - pH''_1}$$

	1.derivace	2.derivace	Ve _q =
9	0.193		11.500 ml
9.1	0.154	9.2	
9.2	0.218	9.4 0.321	
9.3	0.291	9.6 0.363	
9.4	0.247	9.8 -0.217	
9.5	0.393	10 0.727	
9.6	0.307	10.2 -0.428	
9.7	0.523	10.4 1.077	
9.8	0.518	10.6 -0.023	
9.9	0.746	10.8 1.139	
10	1.147	11 2.008	
10.1	2.358	11.2 6.054	
10.2	34.886	11.4 162.639	
10.3	2.387	11.6 -162.495	
10.4	1.137	11.8 -6.251	
10.5	0.699	12 -2.190	
10.6	0.546	12.2 -0.764	
10.7	0.452	12.4 -0.469	
10.8	0.325	12.6 -0.632	
10.9	0.307	12.8 -0.095	
11	0.192	13 -0.574	
11.1	0.250	13.2 0.292	
11.2	0.230	13.4 -0.098	
11.3	0.180	13.6 -0.251	
11.4			
11.5			
11.6			
11.7			
11.8			
11.9			
12			
12.1			
12.2			
12.3			
12.4			
12.5			
12.6			
12.7			
12.8			
12.9			
13			
13.1			
13.2			
13.3			
13.4			
13.5			
13.6			
13.7			
13.8			
13.9			

15	11.99737
15.2	12.01242
15.4	12.03202
15.6	12.04859
15.8	12.08514
16	12.10327
16.2	12.10784
16.4	12.12895
16.6	12.13234
16.8	12.15517
17	12.1607
17.2	12.17227
17.4	12.19352
17.6	12.21548
17.8	12.22068
18	12.22996
18.2	12.23634
18.4	12.24455
18.6	12.2533
18.8	12.27412
19	12.27462
19.2	12.29442
19.4	12.30205
19.6	12.30661
19.8	12.31981
20	12.32497





$$\frac{V_1}{\text{pH}''_1}$$

