

EESTI PÕLLUMAJANDUSE AKADEEMIA

N. RUSSI

T
ABELID
JA
VALEMID
PÕLDKATSETE
ARVUTAMISEKS

TARTU 1965

A-2/023
EESTI PÕLLUMAJANDUSE AKADEEMIA

N. RUSSI

T
ABELID
JA
VALEMID
PÕLDKATSETE
ARVUTAMISEKS

TARTU 1965

Эстонская сельскохозяйственная академия
г. Тарту, ул. Рийа, 12

ТАБЛИЦЫ И ФОРМУЛЫ ДЛЯ ВЫЧИСЛЕНИЯ ДАННЫХ
ПОЛЕВОГО ОПЫТА

Русси, Н. Я.
На эстонском языке

2

Tartu Riikliku Ülikooli
Raamatukogu

63391

E E S S Ö N A

Põllumajanduse spetsialistid tuleb korraldada mitmesuguseid vaatlusi ja katseid (agrotehnilised katsed, sordivõrdlus jt.). Katsete ja vaatluste tulemusena koguneb rohkesti numbrilist materjali, mida töödeldakse järgmiselt: 1) süstematiseeritakse ja korrigeeritakse, 2) arvutatakse katsetulemusi iseloomustavad keskmised näitajad, 3) määratakse katsetulemuste usutavus.

Katseandmete korrigeerimiseks, statistiliste suuruste arvutamiseks ja nende usutavuse määramiseks vajab eksperimentaator mitmesuguseid abitabeleid. Abitabelid on aga hajutatud mitmes käsiraamatus, mis pole alati kõigile kättesaadavad. Pealegi ei kasutata käsiraamatuis ühtseid sümboleid ega valemid, mis muudab nende kasutamise raskeks.

Käesolevas töös esitatakse valimik abitabeleid, mis peaksid eksperimentaatorit põldkatsete arvutamisel abistama.

Tabelite kõrval esitatakse ka ühtsed sümboolid ja lühendid ning valimik valemid. Tuuakse ka dispersioonanalüüsi skeem blokk-katsete ja ladina ruudu arvutamiseks.

"Tabelid ja valemid põldkatsete arvutamiseks" on mõeldud täiendusena "Sordiaretuse ja seemnekasvatuse laboratoorsete tööde" juurde, milles esitatakse üksikasjalikum ülevaade põldkatsete rajamisest, dokumenteerimisest ja arvutamise meetodidest.

"Tabelid ja valemid põldkatsete arvutamiseks" on mõeldud kasutamiseks eeskätt agronoomia ja tootmisõpetuse eriala statistikaarsetele ja mittestatsionaarsetele üliõpilastele sordiaretuse ja seemnekasvatuse, katseteodika ja taimekasvatuse praktikumidel.

Töö puudustest ja vajalikest täiendustest palun informeerida autorit aadressil: Eesti Põllumajanduse Akadeemia taimekasvatuse kateeder, Tartu, I. V. Mitsurini tänav 34.

I. S Ü M B O L I D J A L Ü H E N D I D

- S, Σ = summa tähis, näiteks S_x = lapisaakide summa
- $x, (y)$ = variant (lapisaak, vaatlus)
- f, p = variantide esinemisjuhtude arv, sagedus
- $\bar{x}, (\bar{y})$ = variantide (lapisaakide, vaatluste) aritmeetiline keskmine
- n = korduste (variantide, vaatluste) arv
- N = katselappide arv katses
- v = katseliikmete arv
- V = katseliikmete summa
- b = blokkide (korduste) arv
- B = bloki, samuti korduse summa
- l = tulpade arv
- L = tulba summa
- d = diferents üksikvaatluste vahel
- \bar{d} = diferents aritmeetiliste keskmiste vahel
- D = diferents summade vahel
- s = standardhälve (varem keskmine ruuthälve), valikkogu standardhälve
- $s_{\bar{x}}$ = aritmeetilise keskmise standardhälve (varem aritmeetilise keskmise keskmine viga)
- s_d = üksikvaatluste diferentsi standardhälve (diferentsi keskmine viga)

- $s_{\bar{d}}$ = aritmeetiliste keskmiste diferentsi standardhälve
 s^2 = dispersioon
 s_j^2 = jäägi ehk vea dispersioon
 s_v^2 = variandi dispersioon
 r = korrelatsioonikoefitsient
 SQ = hälvete ruutude summa $[S(x - \bar{x})^2]$
 VA = vabadusastmete arv $(n - 1)$
 $\frac{(Sx)^2}{N}$ = parandusliige ehk baas $(\frac{G^2}{N})$, kus G on kõigi vaatluste kogusumma dispersioonanalüüsil
 P = piirtõenäosuse protsent ehk usalduslävi
 $t = \frac{d}{s_d}$ Studenti kriteerium (t test)
 $PD_{p\%}$ = väikseim tõenäoline diferents (piirdiferents), kui võetakse aluseks piirtõenäosuse (usaldusläve) $p\%$
 $F_{p\%}$ = F-i tabeliväärtus, kui võetakse aluseks piirtõenäosuse (usaldusläve) $p\%$
 $t_{p\%}$ = t tabeliväärtus, kui võetakse aluseks usaldusläve $p\%$
 +++ = positiivne diferents tõenäosusega $p = 0,1\%$, I järk
 ++ = positiivne diferents tõenäosusega $p = 1,0\%$, II järk
 + = positiivne diferents tõenäosusega $p = 5,0\%$, III järk
 - = juhuslikud hälbed, IV järk
 o = negatiivne diferents tõenäosusega $p = 5,0\%$, V järk
 oo = negatiivne diferents tõenäosusega $p = 1,0\%$, VI järk
 ooo = negatiivne diferents tõenäosusega $p = 0,1\%$, VII järk
 1, 2, 3... = katseliikmed
 a, b, c... = kordused (blokid)
 I, II, III... = tulbad
 Polüfaktoriaalkatseis:
 A, B, C = faktorid

$a_1, a_2 \dots$

$b_1, b_2 \dots =$ faktorite astmed

$c_1, c_2 \dots$

132, 124 ... kombinatsioonid

m = meeter

cm = sentimeeter

mm = millimeeter

g = gramm

kg = kilogramm

ts = tsentner

t = tonn

m^2 = ruutmeeter

a = aar

ha = hektar

m^3 = kuupmeeter

dm^3 = kuupdetsimeeter

cm^3 = kuupsentimeeter

l = liiter

hl = hektoliiter

ml = milliliiter

g/L = grammi lapilt

kg/L = kilogrammi lapilt

kg/ha = kilogrammi hektarilt

ts/ha = tsentnerit hektarilt

= = võrdne, võrdub

\approx = ligikaudu võrdne

$<$ = väiksem kui, vähem kui

$>$ = suurem kui, rohkem kui

\leq = väiksem või võrdne

\geq = suurem või võrdne

II. VALIMIK TÄHTSAMAID VALEMEID

Aritmeetiline keskmine:

$$\bar{x} = \frac{Sx}{n}; \quad \left(\frac{x_1 + x_2 + \dots + x_n}{n} \right)$$

$$\bar{x} = \frac{Sfx}{n}; \quad \left(\frac{f_1x_1 + f_2x_2 + \dots + f_nx_n}{n} \right)$$

$$\bar{x} = A + b, \text{ kus } b = \frac{Sf(x - A)}{n};$$

$$\bar{x} = A + i \cdot b_i, \text{ kus } i = \text{intervall ja } b_i = \frac{Sfa_i}{n},$$

a_i - hálbed intervallühikutes.

Kaalutud aritmeetiline keskmine:

$$\bar{x} = \frac{n_1\bar{x}_1 + n_2\bar{x}_2 + \dots + n_m\bar{x}_m}{n_1 + n_2 + \dots + n_m}.$$

Hálvete ruutude summa:

$$S(x - \bar{x})^2; \quad Sx^2 - \bar{x}Sx; \quad Sx^2 - \frac{(Sx)^2}{n}.$$

Keskmine ruuthálve ehk standardhálve (hajumismõõt):

$$s = \sqrt{\frac{S(x - \bar{x})^2}{n - 1}}, \text{ kui } n < 40 \quad \text{ja} \quad s = \sqrt{\frac{S(x - \bar{x})^2}{n}}, \text{ kui } n \gg 40;$$

$$s = \sqrt{\frac{Sx^2 - \bar{x}Sx}{n - 1}}; \quad s = \sqrt{\frac{Sfx^2 - \bar{x}Sfx}{n - 1}};$$

$$s = \sqrt{\frac{Sfx^2}{n} - \bar{x}^2}; \quad s = \sqrt{\frac{Sf(x - A)^2}{n} - b^2};$$

$$s = i \sqrt{\frac{Sfa_1^2}{n} - b_1^2}$$

Aritmeetilise keskmise standardhälve (varem aritmeetilise keskmise keskmise viga):

$$s_{\bar{x}} = \frac{s}{\sqrt{n}} = \sqrt{\frac{Sx^2 - \bar{x}Sx}{n(n-1)}}; \quad s_{\bar{x}} = \sqrt{\frac{S(x - \bar{x})^2}{n(n-1)}}$$

Alternatiivsete ridade standardhälve:

$$s = \frac{\sqrt{p_1 \cdot p_0}}{n}$$

Variatsioonikoefitsient:

$$s\% = \frac{100 \cdot s}{\bar{x}}$$

Diferents:

$$d = x_1 - x_2; \quad \bar{d} = \bar{x}_1 - \bar{x}_2$$

Diferentsi standardhälve (diferentsi viga):

$$s_d = \sqrt{\frac{s_1^2}{n_1} + \frac{s_2^2}{n_2}}$$

$$s_{\bar{d}} = \sqrt{\frac{s_{\bar{x}_1}^2}{n_1} + \frac{s_{\bar{x}_2}^2}{n_2}} = \sqrt{\frac{S(x - \bar{x}_1)^2 + S(x - \bar{x}_2)^2}{n_1 + n_2 - 2}} \quad (\text{kasutatakse}$$

kahe aritmeetilise keskmise diferentsi hindamisel);

$$s_{\bar{d}} = \sqrt{\frac{2 \cdot s_d^2}{n}} \quad (\text{diferentsi standardhälve dispersioonanalüüsil}).$$

t test:

$$t = \frac{\bar{x}}{s_{\bar{x}}}; \quad t = \frac{\bar{d}}{s_{\bar{d}}}; \quad t = \frac{r}{s_r} = \frac{r}{1 - r^2} \sqrt{n' - 1}$$

F test:

$$F_{\text{emp.}} = \frac{s_v^2}{s_j^2} \quad (\text{dispersioonanalüüsi korral}).$$

Korrelatsioonikoefitsient:

$$r = \frac{S[(x - \bar{x})(y - \bar{y})]}{S[(x - \bar{x})^2] S[(y - \bar{y})^2]};$$

$$s_r = \frac{1 - r^2}{\sqrt{n' - 1}}, \text{ kus } n' \text{ on paariliste vaatluste arv.}$$

$$r = \frac{P_I \cdot P_{IV} - P_{II} \cdot P_{III}}{\sqrt{P_{O_x} \cdot P_{1_x} \cdot P_{O_y} \cdot P_{1_y}}} \text{ (alternatiivsete ridade korrelatsioon).}$$

Valemid dispersioonanalüüsiks:

Hälvete ruutude summa arvutamine

Kogu SQ: $SQ_k = Sx^2 - \bar{x}Sx.$

Variandi SQ: $SQ_v = \frac{SV^2}{b} - \bar{x}Sx.$

Korduse SQ: $SQ_b = \frac{SB^2}{v} - \bar{x}Sx.$

Tulba SQ: $SQ_l = \frac{SL^2}{v} - \bar{x}Sx$ (ladina ruudu korral).

Jäägi SQ: $SQ_j = SQ_k - (SQ_v + SQ_b + SQ_l).$

Dispersiooni arvutamine:

Variandi dispersioon - s_v^2 : $s_v^2 = \frac{SQ_v}{VA_v}.$

Jäägi dispersioon - s_j^2 : $s_j^2 = \frac{SQ_j}{VA_j}.$

Korduse dispersioon - s_b^2 : $s_b^2 = \frac{SQ_b}{VA_b}.$

Kogu dispersioon - s_k^2 : $s_k^2 = \frac{SQ_k}{VA_k}.$

III. TABELITE KASUTAMISE JUHEND

Enamik tabelleist on arusaadavad ilma selgitusteta. See-pärast esitame selgituse ainult nende tabelite kohta, mille kasutamise viis pole ilmne.

1. TABEL KASVUAJA PIKKUSE ARVUTAMISEKS.

2. TAIMEDE ARV HEKTARIL.

Taimede arv hektaril leitakse reavahe keskmise laiuse ja taimede keskmise vahekauguse põhjal reas.

3. TUHANDE SEEMNE KAALUDE TABEL.

Tabelit kasutatakse esmajärjekorras valiktaimede 1000 seemne kaalu määramisel.

4. TABEL TÄRKLISESISALDUSE MÄÄRAMISEKS KARTULIMUGULAIS ERIKAALU ALUSEL.

Vee temperatuur mugulate kaalumisel olgu $17,5^{\circ}\text{C}$.

5. PARANDUS KUIVAINE- JA TÄRKLISESISALDUSELE VEE TEMPERATUURI ERINEVUSE ARVEL.

6. KUIVAINE MÄÄRAMINE RAKUMAHLAS REFRAKTOMEETRIGA 20°C JUURES.

7. RAHVUSVAHELINE TEMPERATUURIKORREKTSIOONI TABEL.

Tabelist 6 leitud väärtused kehtivad vaid siis, kui lügem refraktomeetrit tehti 20°C juures. Kui murdumisnäitaja määrati erineval temperatuuril, siis parandatakse tabelist 6 leitud protsentarvu tabeli 7 põhjal.

8. ja 9. KOEFITSIENDID ERINEVA KUIVAINESISALDUSEGA SEEMNETE KAALU ÜMBERARVESTAMISEKS 86%-LISELE VÕI 88%-LISELE KUIVAINESISALDUSELE.

Õhukuivade seemnete kaal korrutatakse nende tegeliku kuivainesisalduse järgi tabelist 8 või 9 leitud koefitsiendiga. Korrutamise tulemusena saadakse seemnete kaal vastavalt 86%-lise või 88%-lise kuivainesisalduse puhul.

10. KOEFITSIENDID ERINEVA NIISKUSEGA SEEMNETE KAALU
ÜMBERARVUTAMISEKS 14%-LISELE NIISKUSESISALDUSELE.

Tabelit kasutatakse seemnete kaalu ümberarvutamiseks siis, kui nende niiskus on määratud elektrilise niiskusemäärajaga, mis annab tulemused niiskuse protsendi näol.

11. ARVUDE 1 KUNI 999 RUUDUD.

Selleks et leida mingi arvu ruut, rühmitatakse arv viimase numbri eraldamise teel. Näiteks arv 63 rühmitatakse 6 ja 3, 175 rühmitatakse 17 ja 5, 225 rühmitatakse 22 ja 5. Arvu esimene osa näitab ruutude tabelis rida, teine tulpa, mille ristumispunktist leitakse arvu ruut.

Näide: Arvu 556 ruudu leiame rea 55 ja tulpa 6 ristumiskohal: 309 136.

Ruutude tabelit saab kasutada ka ruutjuurte leidmiseks:

Näide: Leida ruutjuur arvust 67 464! Leiame tabelist arvu, mis kõige vähem erineb arvust 67 464. Niisuguse arvu leiame 26. rea ja tulpa 0 ristumiskohalt. Järelikult $\sqrt{67\ 464} = 260$.

Interpoleerimisega võib leida täpsema tulemuse.

Ruutjuure saab leida ka murdarvust.

Näide: Leida $\sqrt{32,300}$! Numbrite arv peale koma täiendatakse paarisarvuni: $\sqrt{32,3000}$. Arv 323 000 leitakse tabelist, kus ta asub 56. rea ja 8. tulpa ristumiskohal. Saadud arvul 568 eraldatakse komaga pool selle arvu ruudu komakohtade arvust: $\sqrt{32,3000} \approx 5,68$.

12. ARVUDE 1 KUNI 2499 RUUTJUURED.

Ruutjuurte leidmiseks rühmitatakse arv nii nagu ruutude leidmisel.

Näide: Leida $\sqrt{2356}$!

Rühmitame: 235 - 6. 6. tulpa 235. reas leiame 48,539 - ruutjuure 2356-st.

13. ARVUDE 1 KUNI 2499 PÖÖRDVÄÄRTUSED.

Iga jagamise võib asendada korrutamise, kui jagatavat korrutada jagaja pöördväärtusega.

Näide 1. $\frac{2750}{125} = 2750 \cdot \frac{1}{125}$

Arvu 125 pöördväärtuse leiame 5. tulba 12. reas = 800 000.

Koma asetatakse järgmise reegli kohaselt:

1/1,001	kuni 1/10	- - - 0,
1/10,01	kuni 1/100	- - - 0,0
1/100,1	kuni 1/1000	- - - 0,00
1/1000	kuni 1/2500	- - - 0,000

Kuue punkti asemele paigutatakse tabelist leitud arv ja korrutatakse:

$$2750 \cdot 0,00800000 = \underline{22,00}.$$

$$\text{Näide 2. } \frac{5,458}{3,28} = 5,458 \cdot \frac{1}{3,28}.$$

Arvu 3,28 pöördväärtus = 0,304 878.

$$5,458 \cdot 0,304 878 = \underline{1,664024}.$$

14. TABELID ARITMEETILISE KESKMISE STANDARDHÄLBE ($s_{\bar{x}}$) LEIDMISEKS.

Kui katseandmete arvutamine toimub hektarisaakide baasil, saab $s_{\bar{x}}$ leida tabelist korduste arvu (n) ja hälvete ruutude summa $\sum(x - \bar{x})^2$ põhjal.

Korduste arvule vastavast lahtrist leitakse arv, mis kõige vähem erineb arvutatud hälvete ruutude summast. Leitud summaga samal real esimeses lahtris ongi otsitav $s_{\bar{x}}$ väärtus.

$$\text{Näide: } S(x - \bar{x})^2 = 342830, n = 4, \text{ leida } s_{\bar{x}}!$$

Lahtris n = 4 leiame sobiva summa ja sellega samalt realt esimesest lahtrist $s_{\bar{x}} = 169$.

15. F-i VÄÄRTUSED (FISCHERI KRITEERIUM) p = 5% ja 1% PUHUL.

F-i väärtus leitakse variandi ja jäägi (vea) vabadusastmete järgi 5%-lise või 1%-lise usaldusläve juures.

16. P VÄÄRTUSED %-DES.

P väärtused %-des leitakse VA ja t väärtuse põhjal.

17. t VÄÄRTUSED (STUDENTI KRITEERIUM) p = 5%, 1% JA 0,1% PUHUL.

t väärtus leitakse eksperimentaatori poolt püstitatud P% ja vabadusastmete arvu (VA) alusel.

$$\text{Näide: Kui } P = 5\% \text{ ja } VA = 9, \text{ siis } t = 2,26.$$

IV. ARVUTAMISE ABITABELID

1. TABEL KASVUAJA PIKKUSE ARVUTAMISEKS

I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	
Päevade arv aasta algusest normaalaastal												
1	32	60	91	121	152	182	213	244	274	305	335	1
2	33	61	92	122	153	183	214	245	275	306	336	2
3	34	62	93	123	154	184	215	246	276	307	337	3
4	35	63	94	124	155	185	216	247	277	308	338	4
5	36	64	95	125	156	186	217	248	278	309	339	5
6	37	65	96	126	157	187	218	249	279	310	340	6
7	38	66	97	127	158	188	219	250	280	311	341	7
8	39	67	98	128	159	189	220	251	281	312	342	8
9	40	68	99	129	160	190	221	252	282	313	343	9
10	41	69	100	130	161	191	222	253	283	314	344	10
11	42	70	101	131	162	192	223	254	284	315	345	11
12	43	71	102	132	163	193	224	255	285	316	346	12
13	44	72	103	133	164	194	225	256	286	317	347	13
14	45	73	104	134	165	195	226	257	287	318	348	14
15	46	74	105	135	166	196	227	258	288	319	349	15
16	47	75	106	136	167	197	228	259	289	320	350	16
17	48	76	107	137	168	198	229	260	290	321	351	17
18	49	77	108	138	169	199	230	261	291	322	352	18
19	50	78	109	139	170	200	231	262	292	323	353	19
20	51	79	110	140	171	201	232	263	293	324	354	20
21	52	80	111	141	172	202	233	264	294	325	355	21
22	53	81	112	142	173	203	234	265	295	326	356	22
23	54	82	113	143	174	204	235	266	296	327	357	23
24	55	83	114	144	175	205	236	267	297	328	358	24
25	56	84	115	145	176	206	237	268	298	329	359	25
26	57	85	116	146	177	207	238	269	299	330	360	26
27	58	86	117	147	178	208	239	270	300	331	361	27
28	59	87	118	148	179	209	240	271	301	332	362	28
29	—	88	119	149	180	210	241	272	302	333	363	29
30	—	89	120	150	181	211	242	273	303	334	364	30
31	—	90	—	151	—	212	243	—	304	—	365	31

2. TAIMEDE ARV HEKTARIL.

Vahekaugus ridades (cm)	Reavahe (cm)					
	90	80	70	60	50	45
90	12346					
80	13889	15625				
70	15873	17857	20408			
60	18518	20833	23810	27778		
50	22222	25000	28571	33333	40000	
45	24691	27778	31746	37037	44444	49383
40	27778	31250	35714	41667	50000	55556
35	31746	35714	40816	47619	57143	63492
30	37037	41667	47619	55556	66667	74074
25	44444	50000	57143	66667	80000	88887
20	55556	62500	71428	83333	100000	111111
15	74074	83333	95238	111111	133333	148148
10	111111	125000	142858	166667	200000	222222
5				333333	400000	444444
2,5						888889
1						

40	35	30	25	20	15	10
----	----	----	----	----	----	----

62500						
71429	81633					
83333	95238	111111				
100000	114286	133333	160000			
125000	142857	166667	200000	250000		
166667	190476	222222	266667	333333	444444	
250000	285714	333333	400000	500000	666667	1000000
500000	571428	666667	800000	1000000	1333333	2000000
1000000	1142857	1333333	1600000	2000000	2666667	4000000
	2857143	3333333	4000000	5000000	6666667	10000000

3. TUHANDE SEEMNE KAALUDE TABEL

Seemnete kaal g	seemnete arv				
	15	20	25	30	35
0,1	6,7	5,0	4,0	3,3	2,9
0,2	13,3	10,0	8,0	6,7	5,7
0,3	20,0	15,0	12,0	10,0	8,6
0,4	26,7	20,0	16,0	13,3	11,4
0,5	33,3	25,0	20,0	16,7	14,3
0,6	40,0	30,0	24,0	20,0	17,1
0,7	46,7	35,0	28,0	23,3	20,0
0,8	53,3	40,0	32,0	26,7	22,9
0,9	60,0	45,0	36,0	30,0	25,7
1,0	66,7	50,0	40,0	33,3	28,6
1,1	73,7	55,0	44,0	36,7	31,4
1,2	80,0	60,0	48,0	40,0	34,3
1,3	86,7	65,0	52,0	43,3	37,1
1,4	93,3	70,0	56,0	46,7	40,0
1,5	100,0	75,0	60,0	50,0	42,9
1,6	106,7	80,0	64,0	53,3	45,7
1,7	113,3	85,0	68,0	56,7	48,6
1,8	120,0	90,0	72,0	60,0	51,4
1,9	126,7	95,0	76,0	63,3	54,3
2,0	133,3	100,0	80,0	66,7	57,1
2,1	140,0	105,0	84,0	70,0	60,0
2,2	146,7	110,0	88,0	73,3	62,9
2,3	153,3	115,0	92,0	76,7	65,7
2,4	160,0	120,0	96,0	80,0	68,6
2,5	166,7	125,0	100,0	83,3	71,4
2,6	173,3	130,0	104,0	86,7	74,3
2,7	180,0	135,0	108,0	90,0	77,1
2,8	186,7	140,0	112,0	93,3	80,0
2,9	193,3	145,0	116,0	96,7	82,9

40	45	50	55	60	65
2,5	2,2	2,0	1,8	1,7	1,5
5,0	4,4	4,0	3,6	3,3	3,1
7,5	6,7	6,0	5,5	5,0	4,6
10,0	8,9	8,0	7,3	6,7	6,2
12,5	11,1	10,0	9,1	8,3	7,7
15,0	13,3	12,0	10,9	10,0	9,2
17,5	15,5	14,0	12,7	11,7	10,8
20,0	17,8	16,0	14,5	13,3	12,3
22,5	20,0	18,0	16,4	15,0	13,8
25,0	22,0	20,0	18,2	16,7	15,4
27,5	24,4	22,0	20,0	18,3	16,9
30,0	26,7	24,0	21,8	20,0	18,5
32,5	28,9	26,0	23,6	21,7	20,0
35,0	31,1	28,0	25,5	23,3	21,5
37,5	33,3	30,0	27,3	25,0	23,1
40,0	35,5	32,0	29,1	26,7	24,6
42,5	37,8	34,0	30,9	28,3	26,2
45,0	40,0	36,0	32,7	30,0	27,7
47,5	42,2	38,0	34,5	31,7	29,2
50,0	44,4	40,0	36,4	33,3	30,8
52,5	46,7	42,0	38,2	35,0	32,3
55,0	48,9	44,0	40,0	36,7	33,8
57,5	51,1	46,0	41,8	38,3	35,4
60,0	53,3	48,0	43,6	40,0	36,9
62,5	55,5	50,0	45,5	41,7	38,5
65,0	57,8	52,0	47,3	43,3	40,0
67,5	60,0	54,0	49,1	45,0	41,5
70,0	62,2	56,0	50,9	46,7	43,1
72,5	64,4	58,0	52,7	48,3	44,6

Seemnete kraal g	seemnete arv				
	15	20	25	30	35
3,0	200,0	150,0	120,0	100,0	85,7
3,1	206,7	155,0	124,0	103,3	88,6
3,2	213,3	160,0	128,0	106,7	91,4
3,3	220,0	165,0	132,0	110,0	94,3
3,4	226,7	170,0	136,0	113,3	97,1
3,5	233,3	175,0	140,0	116,7	100,0
3,6	240,0	180,0	144,0	120,0	102,8
3,7	246,7	185,0	148,0	123,3	105,7
3,8	253,3	190,0	152,0	126,7	108,6
3,9	260,0	195,0	156,0	130,0	111,4
4,0	266,7	200,0	160,0	133,3	114,3
4,1	273,3	205,0	164,0	136,7	117,1
4,2	280,0	210,0	168,0	140,0	120,0
4,3	286,7	215,0	172,0	143,3	122,9
4,4	293,0	220,0	176,0	146,7	125,7
4,5	300,0	225,0	180,0	150,0	128,6
4,6	306,7	230,0	184,0	153,3	131,4
4,7	313,3	235,0	188,0	156,7	134,3
4,8	320,0	240,0	192,0	160,0	137,1
4,9	326,7	245,0	196,0	163,3	140,0
5,0	333,3	250,0	200,0	166,7	142,9
5,5	366,7	275,0	220,0	183,3	157,1
6,0	400,0	300,0	240,0	200,0	171,4
6,5	433,3	325,0	260,0	216,7	185,7
7,0	466,7	350,0	280,0	233,3	200,0
7,5	500,0	375,0	300,0	250,0	214,3
8,0	533,3	400,0	320,0	266,7	228,6
8,5	566,7	425,0	340,0	283,3	242,9

40	45	50	55	60	65
75,0	66,7	60,0	54,5	50,0	46,2
77,5	68,9	62,0	56,4	51,7	47,7
80,0	71,1	64,0	58,2	53,3	49,2
82,5	73,3	66,0	60,0	55,0	50,8
85,0	75,5	68,0	61,8	56,7	52,3
87,5	77,8	70,0	63,6	58,3	53,8
90,0	80,0	72,0	65,5	60,0	55,4
92,5	82,2	74,0	67,3	61,7	56,9
95,0	84,4	76,0	69,1	63,3	58,5
97,5	86,7	78,0	70,9	65,0	60,0
100,0	88,9	80,0	72,7	66,7	61,5
102,5	91,1	82,0	74,5	68,3	63,1
105,0	93,3	84,0	76,4	70,0	64,6
107,5	95,5	86,0	78,2	71,7	66,2
110,0	97,8	88,0	80,0	73,3	67,7
112,5	100,0	90,0	81,8	75,0	69,2
115,0	102,2	92,0	83,6	76,7	70,8
117,5	104,4	94,0	85,5	78,3	72,3
120,0	106,7	96,0	87,3	80,0	73,8
122,5	108,9	98,0	89,1	81,7	75,4
125,0	111,1	100,0	90,9	83,3	76,9
137,5	122,2	110,0	100,0	91,7	84,6
150,0	133,3	120,0	109,1	100,0	92,3
162,5	144,4	130,0	118,2	108,3	100,0
175,0	155,6	140,0	127,3	116,7	107,7
187,5	166,7	150,0	136,4	125,0	115,4
200,0	177,8	160,0	145,0	133,3	123,1
212,5	188,9	170,0	154,5	141,7	130,8

Seemnete kaal g	seemnete arv				
	15	20	25	30	35
9,0	600,0	450,0	360,0	300,0	257,1
9,5	633,3	475,0	380,0	316,7	271,4
10,0	666,7	500,0	400,0	333,3	285,7
11,0	733,3	550,0	440,0	366,7	314,3
12,0	800,0	600,0	480,0	400,0	342,9
13,0	866,7	650,0	520,0	433,3	371,4
14,0	933,3	700,0	560,0	466,7	400,0
15,0	1000,0	750,0	600,0	500,0	428,6
16,0	1066,7	800,0	640,0	533,3	457,1
17,0	1133,3	850,0	680,0	566,7	485,7
18,0	1200,0	900,0	720,0	600,0	514,3
19,0	1266,7	950,0	760,0	633,3	542,9
20,0	1333,3	1000,0	800,0	666,7	571,4
21,0	1400,0	1050,0	840,0	700,0	600,0
22,0	1466,7	1100,0	880,0	733,3	628,6
23,0	1533,3	1150,0	920,0	766,7	657,1
24,0	1600,0	1200,0	960,0	800,0	685,7
25,0		1250,0	1000,0	833,3	714,3
26,0		1300,0	1040,0	866,7	742,9
27,0		1350,0	1080,0	900,0	771,4
28,0		1400,0	1120,0	933,3	800,0
29,0		1450,0	1160,0	966,7	828,6
30,0		1500,0	1200,0	1000,0	857,1
32,0			1280,0	1066,7	914,3
34,0			1360,0	1133,3	971,4
36,0			1440,0	1200,0	1028,6
38,0			1520,0	1266,7	1085,7
40,0			1600,0	1333,3	1142,9
42,0				1400,0	1200,0
44,0				1466,7	1257,1

40	45	50	55	60	65
225,0	200,0	180,0	163,6	150,0	138,5
237,5	211,1	190,0	172,7	158,3	146,2
250,0	222,2	200,0	181,8	166,7	153,8
275,0	244,4	220,0	200,0	183,3	169,2
300,0	266,7	240,0	218,2	200,0	184,6
325,0	288,9	260,0	236,4	216,7	200,0
350,0	311,1	280,0	254,5	233,3	215,4
375,0	333,3	300,0	272,7	250,0	230,8
400,0	355,6	320,0	290,9	266,7	246,2
425,0	377,8	340,0	309,1	283,3	261,5
450,0	400,0	360,0	327,3	300,0	276,9
475,0	422,2	380,0	345,5	316,7	292,3
500,0	444,4	400,0	363,6	333,3	307,7
525,0	466,7	420,0	381,8	350,0	323,1
550,0	488,9	440,0	400,0	366,7	338,5
575,0	511,1	460,0	418,2	383,3	353,8
600,0	533,3	480,0	436,4	400,0	369,2
625,0	555,6	500,0	454,5	416,7	384,6
650,0	577,8	520,0	472,7	433,3	400,0
675,0	600,0	540,0	490,9	450,0	415,4
700,0	622,2	560,0	509,1	466,7	430,8
725,0	644,4	580,0	527,3	483,3	446,2
750,0	666,7	600,0	545,5	500,0	461,5
800,0	711,1	640,0	581,8	533,3	492,3
850,0	755,6	680,0	618,2	566,7	523,1
900,0	800,0	720,0	654,5	600,0	553,8
950,0	844,4	760,0	690,9	633,0	584,6
1000,0	888,9	800,0	727,3	666,7	615,4
1050,0	933,3	840,0	763,6	700,0	646,2
1100,0	977,8	880,0	800,0	733,3	676,9

Seemnete kaal g	seemnete arv				
	15	20	25	30	35
46,0				1533,3	1314,3
48,0					1371,4
50,0					1428,6
52,0					1485,7
54,0					1542,9
56,0					
58,0					
60,0					
62,0					
64,0					
66,0					
68,0					
70,0					

40	45	50	55	60	65
1150,0	1022,2	920,0	836,4	766,7	707,7
1200,0	1066,6	960,0	872,7	800,0	738,5
1250,0	1111,1	1000,0	909,1	833,3	769,2
1300,0	1155,6	1040,0	945,5	866,7	800,0
1350,0	1200,0	1080,0	981,8	900,0	830,8
1400,0	1244,4	1120,0	1018,2	933,3	861,5
1450,0	1288,9	1160,0	1054,5	966,7	892,3
1500,0	1333,3	1200,0	1090,9	1000,0	923,1
1550,0	1377,8	1240,0	1127,3	1033,3	953,8
1600,0	1422,2	1280,0	1163,6	1066,7	984,6
	1466,7	1320,0	1200,0	1100,0	1015,4
	1511,1	1360,0	1236,4	1133,3	1046,2
	1555,6	1400,0	1272,7	1166,7	1076,9

4. TABEL TÄRKLISESISALDUSE MÄÄRAMISEKS KARTULIMUGULAIS

ERIKAALU JÄRGI

500 g kartu- lite kaal vees	Eri- kaal	Kuiv- ainet (%)	Tärk- list (%)	500 g kartu- lite kaal vees	Eri- kaal	Kuiv- ainet (%)	Tärk- list (%)
235	1,0493	13,100	7,400	465	1,1025	24,501	18,746
240	1,0504	13,300	7,600	470	1,1038	24,779	19,027
245	1,0515	13,600	7,800	475	1,1050	25,036	19,284
250	1,0526	13,800	8,100	480	1,1062	25,293	19,541
255	1,0537	14,100	8,300	485	1,1074	25,549	19,797
260	1,0549	14,300	8,600	490	1,1086	25,806	20,054
265	1,0560	14,600	8,800	495	1,1099	26,065	20,333
270	1,0571	14,800	9,000	500	1,1111	26,341	20,589
275	1,0582	15,000	9,300	505	1,1123	26,598	20,846
280	1,0593	15,300	9,500	510	1,1136	26,876	21,124
285	1,0604	15,500	9,700	515	1,1148	27,133	21,381
290	1,0616	15,748	9,996	520	1,1161	27,411	21,659
295	1,0627	15,948	10,232	525	1,1173	27,668	21,916
300	1,0638	16,219	10,468	530	1,1186	27,946	22,194
305	1,0650	16,476	10,724	535	1,1198	28,203	22,451
310	1,0661	16,711	10,959	540	1,1211	28,481	22,629
315	1,0672	16,947	11,195	545	1,1224	28,760	23,008
320	1,0684	17,204	11,452	550	1,1236	29,016	23,264
325	1,0695	17,439	11,687	555	1,1249	29,295	23,543
330	1,0707	17,696	11,944	560	1,1261	29,551	23,799
335	1,0718	17,931	12,179	565	1,1274	29,830	24,078
340	1,0730	18,188	12,436	570	1,1286	30,086	24,334
345	1,0741	18,423	12,671	575	1,1299	30,365	24,613
350	1,0753	18,680	12,928	580	1,1312	30,643	24,891
355	1,0764	18,916	13,164	585	1,1325	30,921	25,169
360	1,0776	19,172	13,420	590	1,1338	31,199	25,447
365	1,0787	19,408	13,656	595	1,1351	31,477	25,725
370	1,0799	19,665	13,913	600	1,1364	31,756	26,004
375	1,0811	19,921	14,169	605	1,1377	32,034	26,282
380	1,0822	20,157	14,405	610	1,1390	32,312	26,560
385	1,0834	20,414	14,662	615	1,1403	32,590	26,888
390	1,0846	20,670	14,918	620	1,1416	32,868	27,116
395	1,0858	20,927	15,175	625	1,1429	33,147	27,395
400	1,0870	21,184	15,432	630	1,1442	33,425	27,673
405	1,0881	21,419	15,667	635	1,1455	33,703	27,951
410	1,0893	21,676	15,924	640	1,1468	33,981	28,229
415	1,0905	21,933	16,181	645	1,1481	34,259	28,507
420	1,0917	22,190	16,438	650	1,1494	34,538	28,786
425	1,0929	22,447	16,695	655	1,1507	34,816	29,064
430	1,0941	22,703	16,951	660	1,1521	35,115	29,363
435	1,0953	22,960	17,208	665	1,1534	35,394	29,642
440	1,0965	23,217	17,465	670	1,1547	35,672	29,920
445	1,0977	23,474	17,722	675	1,1561	35,971	30,219
450	1,0989	23,731	17,979	680	1,1574	36,249	30,498
455	1,1001	23,987	18,235	685	1,1587	36,528	30,776
460	1,1013	24,244	18,492	690	1,1601	36,827	31,075

5. PARANDUS KUIVAINE- JA TÄRKLISESISALDUSELE VEE TEMPERA-
TUURI ERINEVUSE ARVEL (lisa tabelile 4)

Vee tempe- ratuur (C°)	Paran- dus	Vee tempera- tuur (C°)	Parandus
7	+0,27	15	+0,09
8	+0,26	16	+0,06
9	+0,25	17	+0,02
10	+0,23	17,5	±0,00
11	+0,20	18	-0,02
12	+0,17	19	-0,05
13	+0,15	20	-0,08
14	+0,12	21	-0,12

Mugulate kuivaine- ja tärklikesisalduse võib arvutada järgmiste valemite põhjal:

$$\text{kuivaine protsent } y = 0,05x + 2,00,$$

$$\text{tärglise protsent } y_t = 0,0478x - 2,28,$$

kus x - 5 kg kartulite kaal vees.

Nagu näitavad sellekohased uurimused, saadakse eeltoodud valemitega kõige täpsem mugulate kuivaine- ja tärglikesisaldus.

6. KUIVAINE MÄÄRAMINE RAKUMAHLAS REFRAKTOMEETRIGA

20° C JUURES

Murdumis- näitaja	Kuivaine protsent	Murdumis- näitaja	Kuivaine protsent
1,3330	0	1,3399	4,9
1,3331	0,1	1,3400	5,0
1,3333	0,2	1,3402	5,1
1,3334	0,3	1,3403	5,2
1,3336	0,4	1,3405	5,3
1,3337	0,5	1,3406	5,4
1,3338	0,6	1,3408	5,5
1,3340	0,7	1,3409	5,6
1,3341	0,8	1,3411	5,7
1,3343	0,9	1,3412	5,8
1,3344	1,0	1,3414	5,9
1,3345	1,1	1,3415	6,0
1,3347	1,2	1,3417	6,1
1,3348	1,3	1,3418	6,2
1,3350	1,4	1,3420	6,3
1,3351	1,5	1,3421	6,4
1,3352	1,6	1,3423	6,5
1,3354	1,7	1,3424	6,6
1,3355	1,8	1,3426	6,7
1,3357	1,9	1,3427	6,8
1,3358	2,0	1,3429	6,9
1,3359	2,1	1,3430	7,0
1,3361	2,2	1,3432	7,1
1,3362	2,3	1,3433	7,2
1,3364	2,4	1,3435	7,3
1,3365	2,5	1,3436	7,4
1,3366	2,6	1,3438	7,5
1,3368	2,7	1,3439	7,6
1,3369	2,8	1,3441	7,7
1,3371	2,9	1,3442	7,8
1,3372	3,0	1,3444	7,9
1,3373	3,1	1,3445	8,0
1,3375	3,2	1,3447	8,1
1,3376	3,3	1,3448	8,2
1,3378	3,4	1,3450	8,3
1,3379	3,5	1,3451	8,4
1,3380	3,6	1,3453	8,5
1,3382	3,7	1,3454	8,6
1,3383	3,8	1,3456	8,7
1,3385	3,9	1,3457	8,8
1,3386	4,0	1,3459	8,9
1,3387	4,1	1,3460	9,0
1,3389	4,2	1,3462	9,1
1,3390	4,3	1,3463	9,2
1,3392	4,4	1,3465	9,3
1,3393	4,5	1,3466	9,4
1,3394	4,6	1,3468	9,5
1,3396	4,7	1,3469	9,6
1,3397	4,8	1,3471	9,7

Murdumis- näitaja	Kuivaine protsent	Murdumis- näitaja	Kuivaine protsent
1,3472	9,8	1,3554	15,0
1,3474	9,9	1,3556	15,1
1,3475	10,0	1,3557	15,2
1,3477	10,1	1,3559	15,3
1,3478	10,2	1,3561	15,4
1,3480	10,3	1,3562	15,5
1,3481	10,4	1,3564	15,6
1,3483	10,5	1,3566	15,7
1,3484	10,6	1,3567	15,8
1,3486	10,7	1,3569	15,9
1,3488	10,8	1,3571	16,0
1,3489	10,9	1,3572	16,1
1,3491	11,0	1,3574	16,2
1,3492	11,1	1,3576	16,8
1,3494	11,2	1,3577	16,4
1,3496	11,3	1,3579	16,5
1,3497	11,4	1,3581	16,6
1,3499	11,5	1,3582	16,7
1,3500	11,6	1,3584	16,8
1,3502	11,7	1,3586	16,9
1,3503	11,8	1,3587	17,0
1,3505	11,9	1,3589	17,1
1,3507	12,0	1,3591	17,2
1,3508	12,1	1,3592	17,3
1,3510	12,2	1,3594	17,4
1,3511	12,3	1,3596	17,5
1,3513	12,4	1,3597	17,6
1,3515	12,5	1,3599	17,7
1,3516	12,6	1,3600	17,8
1,3518	12,7	1,3602	17,9
1,3519	12,8	1,3604	18,0
1,3521	12,9	1,3605	18,1
1,3522	13,0	1,3607	18,2
1,3524	13,1	1,3609	18,3
1,3526	13,2	1,3610	18,4
1,3527	13,3	1,3612	18,5
1,3529	13,4	1,3614	18,6
1,3530	13,5	1,3615	18,7
1,3532	13,6	1,3617	18,8
1,3533	13,7	1,3619	18,9
1,3535	13,8	1,3620	19,0
1,3537	13,9	1,3622	19,1
1,3538	14,0	1,3624	19,2
1,3540	14,1	1,3625	19,3
1,3541	14,2	1,3627	19,4
1,3543	14,3	1,3629	19,5
1,3545	14,4	1,3630	19,6
1,3546	14,5	1,3632	19,7
1,3548	14,6	1,3634	19,8
1,3549	14,7	1,3635	19,9
1,3551	14,8	1,3637	20,0
1,3552	14,9	1,3639	20,1

Murdumis- näitaja	Kuivaine protsent	Murdumis- näitaja	Kuivaine protsent
1,3640	20,2	1,3730	25,5
1,3642	20,3	1,3732	25,6
1,3644	20,4	1,3733	25,7
1,3645	20,5	1,3735	25,8
1,3647	20,6	1,3737	25,9
1,3649	20,7	1,3739	26,0
1,3650	20,8	1,3741	26,1
1,3652	20,9	1,3742	26,2
1,3654	21,0	1,3744	26,3
1,3655	21,1	1,3746	26,4
1,3657	21,2	1,3748	26,5
1,3659	21,3	1,3749	26,6
1,3661	21,4	1,3751	26,7
1,3662	21,5	1,3753	26,8
1,3664	21,6	1,3755	26,9
1,3666	21,7	1,3757	27,0
1,3667	21,8	1,3758	27,1
1,3669	21,9	1,3760	27,2
1,3671	22,0	1,3762	27,3
1,3672	22,1	1,3764	27,4
1,3674	22,2	1,3766	27,5
1,3676	22,3	1,3767	27,6
1,3677	22,4	1,3769	27,7
1,3679	22,5	1,3771	27,8
1,3681	22,6	1,3773	27,9
1,3682	22,7	1,3774	28,0
1,3684	22,8	1,3776	28,1
1,3686	22,9	1,3778	28,2
1,3687	23,0	1,3780	28,3
1,3689	23,1	1,3782	28,4
1,3691	23,2	1,3783	28,5
1,3692	23,3	1,3785	28,6
1,3694	23,4	1,3787	28,7
1,3696	23,5	1,3789	28,8
1,3697	23,6	1,3790	28,9
1,3699	23,7	1,3792	29,0
1,3701	23,8	1,3794	29,1
1,3703	23,9	1,3796	29,2
1,3704	24,0	1,3798	29,3
1,3706	24,1	1,3799	29,4
1,3708	24,2	1,3801	29,5
1,3709	24,3		
1,3711	24,4		
1,3713	24,5		
1,3714	24,6		
1,3716	24,7		
1,3718	24,8		
1,3719	24,9		
1,3721	25,0		
1,3723	25,1		
1,3725	25,2		
1,3726	25,3		
1,3728	25,4		

7. RAHVUSVAHELINE TEMPERAATURIKORREKTSIOONITABEL
(lisa tabelile 6)

Tem- pera- tuur	Kuivainesisaldus %										
	0	5	10	15	20	25	30	35	40	45	50
10° C	-0,50	-0,54	-0,58	-0,61	-0,64	-0,66	-0,68	-0,70	-0,72	-0,73	-0,74
11° C	-0,46	-0,49	-0,53	-0,55	-0,58	-0,60	-0,62	-0,64	-0,65	-0,66	-0,67
12° C	-0,42	-0,45	-0,48	-0,50	-0,52	-0,54	-0,56	-0,57	-0,58	-0,59	-0,60
13° C	-0,37	-0,40	-0,42	-0,44	-0,46	-0,48	-0,49	-0,50	-0,51	-0,52	-0,53
14° C	-0,33	-0,35	-0,37	-0,39	-0,40	-0,41	-0,42	-0,43	-0,44	-0,45	-0,45
15° C	-0,27	-0,29	-0,31	-0,33	-0,34	-0,34	-0,35	-0,36	-0,37	-0,37	-0,38
16° C	-0,22	-0,24	-0,25	-0,26	-0,27	-0,28	-0,28	-0,29	-0,30	-0,30	-0,30
17° C	-0,17	-0,18	-0,19	-0,20	-0,21	-0,21	-0,21	-0,22	-0,22	-0,23	-0,23
18° C	-0,12	-0,13	-0,13	-0,14	-0,14	-0,14	-0,14	-0,15	-0,15	-0,15	-0,15
19° C	-0,06	-0,06	-0,06	-0,07	-0,07	-0,07	-0,07	-0,08	-0,08	-0,08	-0,08
21° C	+0,06	+0,07	+0,07	+0,07	+0,07	+0,08	+0,08	+0,08	+0,08	+0,08	+0,08
22° C	+0,13	+0,13	+0,14	+0,14	+0,15	+0,15	+0,15	+0,15	+0,15	+0,16	+0,16
23° C	+0,19	+0,20	+0,21	+0,22	+0,22	+0,23	+0,23	+0,23	+0,23	+0,24	+0,24
24° C	+0,26	+0,27	+0,28	+0,29	+0,30	+0,30	+0,31	+0,31	+0,31	+0,31	+0,32
25° C	+0,33	+0,35	+0,36	+0,37	+0,38	+0,38	+0,39	+0,40	+0,40	+0,40	+0,40
26° C	+0,40	+0,42	+0,43	+0,44	+0,45	+0,46	+0,47	+0,48	+0,48	+0,48	+0,48
27° C	+0,48	+0,50	+0,52	+0,53	+0,54	+0,55	+0,55	+0,56	+0,56	+0,56	+0,56
28° C	+0,56	+0,57	+0,60	+0,61	+0,62	+0,63	+0,63	+0,64	+0,64	+0,64	+0,64
29° C	+0,64	+0,66	+0,68	+0,69	+0,71	+0,72	+0,72	+0,73	+0,73	+0,73	+0,73
30° C	+0,72	+0,74	+0,77	+0,78	+0,79	+0,80	+0,80	+0,81	+0,81	+0,81	+0,81

8. KOEFITSIENDID ERINEVA KUIVAINESISALDUSEGA SEEMNETE

KAALU ÜMBERARVUTAMISEKS 86%-LISELE KUIVAINELE

70,0	0,814	71,0	0,826	72,0	0,837	73,0	0,849	74,0	0,860
1	0,815	1	0,827	1	0,838	1	0,850	1	0,862
2	0,816	2	0,828	2	0,840	2	0,851	2	0,863
3	0,817	3	0,829	3	0,841	3	0,852	3	0,864
4	0,819	4	0,830	4	0,842	4	0,853	4	0,865
5	0,820	5	0,831	5	0,843	5	0,855	5	0,866
6	0,821	6	0,833	6	0,844	6	0,856	6	0,867
7	0,822	7	0,834	7	0,845	7	0,857	7	0,869
8	0,823	8	0,835	8	0,847	8	0,858	8	0,870
9	0,824	9	0,836	9	0,848	9	0,859	9	0,871
75,0	0,872	76,0	0,884	77,0	0,895	78,0	0,907	79,0	0,919
1	0,873	1	0,885	1	0,897	1	0,908	1	0,920
2	0,874	2	0,886	2	0,898	2	0,909	2	0,921
3	0,876	3	0,887	3	0,899	3	0,910	3	0,922
4	0,877	4	0,888	4	0,900	4	0,912	4	0,923
5	0,878	5	0,890	5	0,901	5	0,913	5	0,924
6	0,879	6	0,891	6	0,902	6	0,914	6	0,926
7	0,880	7	0,892	7	0,903	7	0,915	7	0,927
8	0,881	8	0,893	8	0,905	8	0,916	8	0,928
9	0,883	9	0,894	9	0,906	9	0,917	9	0,929
80,0	0,930	81,0	0,942	82,0	0,953	83,0	0,965	84,0	0,977
1	0,931	1	0,943	1	0,955	1	0,966	1	0,978
2	0,933	2	0,944	2	0,956	2	0,967	2	0,979
3	0,934	3	0,945	3	0,957	3	0,969	3	0,980
4	0,935	4	0,947	4	0,958	4	0,970	4	0,981
5	0,936	5	0,948	5	0,959	5	0,971	5	0,983
6	0,937	6	0,949	6	0,960	6	0,972	6	0,984
7	0,938	7	0,950	7	0,962	7	0,973	7	0,985
8	0,940	8	0,951	8	0,963	8	0,974	8	0,986
9	0,941	9	0,952	9	0,964	9	0,976	9	0,987
85,0	0,988	86,0	1,000	87,0	1,012	88,0	1,023	89,0	1,035
1	0,990	1	1,001	1	1,013	1	1,024	1	1,036
2	0,991	2	1,002	2	1,014	2	1,026	2	1,037
3	0,992	3	1,003	3	1,015	3	1,027	3	1,038
4	0,993	4	1,005	4	1,016	4	1,028	4	1,040
5	0,994	5	1,006	5	1,017	5	1,029	5	1,041
6	0,995	6	1,007	6	1,019	6	1,030	6	1,042
7	0,997	7	1,008	7	1,020	7	1,031	7	1,043
8	0,998	8	1,009	8	1,021	8	1,033	8	1,044
9	0,999	9	1,010	9	1,022	9	1,034	9	1,045
90,0	1,047	91,0	1,058	92,0	1,070	93,0	1,081	94,0	1,093
1	1,048	1	1,059	1	1,071	1	1,083	1	1,094
2	1,049	2	1,060	2	1,072	2	1,084	2	1,095
3	1,050	3	1,062	3	1,073	3	1,085	3	1,097
4	1,051	4	1,063	4	1,074	4	1,086	4	1,098
5	1,052	5	1,064	5	1,076	5	1,087	5	1,099
6	1,053	6	1,065	6	1,077	6	1,088	6	1,100
7	1,055	7	1,066	7	1,078	7	1,090	7	1,101
8	1,056	8	1,067	8	1,079	8	1,091	8	1,102
9	1,057	9	1,069	9	1,080	9	1,092	9	1,103

9. KOEFITSIENDID ERINEVA KUIVAINESISALDUSEGA SEEMNETE
KAALU ÜMBERARVUTAMISEKS 88%-LISELE KUIVAINELE

70,0	0,795	71,0	0,807	72,0	0,818	73,0	0,830	74,0	0,841
1	0,797	1	0,808	1	0,819	1	0,831	1	0,842
2	0,798	2	0,809	2	0,820	2	0,832	2	0,843
3	0,799	3	0,810	3	0,822	3	0,833	3	0,844
4	0,800	4	0,811	4	0,823	4	0,834	4	0,845
5	0,801	5	0,813	5	0,824	5	0,835	5	0,847
6	0,802	6	0,814	6	0,825	6	0,836	6	0,848
7	0,803	7	0,815	7	0,826	7	0,838	7	0,849
8	0,805	8	0,816	8	0,827	8	0,839	8	0,850
9	0,806	9	0,817	9	0,828	9	0,840	9	0,851
75,0	0,852	76,0	0,864	77,0	0,875	78,0	0,886	79,0	0,898
1	0,853	1	0,865	1	0,876	1	0,888	1	0,899
2	0,855	2	0,866	2	0,877	2	0,889	2	0,900
3	0,856	3	0,867	3	0,878	3	0,890	3	0,901
4	0,857	4	0,868	4	0,880	4	0,891	4	0,902
5	0,858	5	0,869	5	0,881	5	0,892	5	0,903
6	0,859	6	0,870	6	0,882	6	0,893	6	0,905
7	0,860	7	0,872	7	0,883	7	0,894	7	0,906
8	0,861	8	0,873	8	0,884	8	0,895	8	0,907
9	0,863	9	0,874	9	0,885	9	0,897	9	0,908
80,0	0,909	81,0	0,920	82,0	0,932	83,0	0,943	84,0	0,955
1	0,910	1	0,922	1	0,933	1	0,944	1	0,956
2	0,911	2	0,923	2	0,934	2	0,945	2	0,957
3	0,913	3	0,924	3	0,935	3	0,947	3	0,958
4	0,914	4	0,925	4	0,936	4	0,948	4	0,959
5	0,915	5	0,926	5	0,938	5	0,949	5	0,960
6	0,916	6	0,927	6	0,939	6	0,950	6	0,961
7	0,917	7	0,928	7	0,940	7	0,951	7	0,963
8	0,918	8	0,930	8	0,941	8	0,952	8	0,964
9	0,919	9	0,931	9	0,942	9	0,953	9	0,965
85,0	0,966	86,0	0,977	87,0	0,989	88,0	1,000	89,0	1,011
1	0,967	1	0,978	1	0,990	1	1,001	1	1,013
2	0,968	2	0,980	2	0,991	2	1,002	2	1,014
3	0,969	3	0,981	3	0,992	3	1,003	3	1,015
4	0,970	4	0,982	4	0,993	4	1,005	4	1,016
5	0,972	5	0,983	5	0,994	5	1,006	5	1,017
6	0,973	6	0,984	6	0,995	6	1,007	6	1,018
7	0,974	7	0,985	7	0,997	7	1,008	7	1,019
8	0,975	8	0,986	8	0,998	8	1,009	8	1,020
9	0,976	9	0,988	9	0,999	9	1,010	9	1,022
90,0	1,023	91,0	1,034						
1	1,024	1	1,035						
2	1,025	2	1,036						
3	1,026	3	1,038						
4	1,027	4	1,039						
5	1,028	5	1,040						
6	1,030	6	1,041						
7	1,031	7	1,042						
8	1,032	8	1,043						
9	1,033	9	1,044						

10. KOEFITSIENDID ERINEVA NIISKUSEGA SEEMNETE KAALU
 ÜMBERARVUTAMISEKS 14%-LISELE NIISKUSESISALDUSELE

	0	1	2	3	4	5	6	7	8	9
5	1,105	1,104	1,102	1,101	1,100	1,099	1,098	1,097	1,095	1,094
6	1,093	1,092	1,091	1,090	1,088	1,087	1,086	1,085	1,084	1,083
7	1,081	1,080	1,079	1,078	1,077	1,076	1,074	1,073	1,072	1,071
8	1,070	1,069	1,067	1,066	1,065	1,064	1,063	1,062	1,060	1,059
9	1,058	1,057	1,056	1,055	1,053	1,052	1,051	1,050	1,049	1,048
10	1,047	1,045	1,044	1,043	1,042	1,041	1,040	1,038	1,037	1,036
11	1,035	1,034	1,033	1,031	1,030	1,029	1,028	1,027	1,026	1,024
12	1,023	1,022	1,021	1,020	1,019	1,017	1,016	1,015	1,014	1,013
13	1,012	1,010	1,009	1,008	1,007	1,006	1,005	1,003	1,002	1,001
14	1,000	0,999	0,998	0,997	0,995	0,994	0,993	0,992	0,991	0,990
15	0,988	0,987	0,986	0,985	0,984	0,983	0,981	0,980	0,979	0,978
16	0,977	0,976	0,974	0,973	0,972	0,971	0,970	0,969	0,967	0,966
17	0,965	0,964	0,963	0,962	0,960	0,959	0,958	0,957	0,956	0,955
18	0,953	0,952	0,951	0,950	0,949	0,948	0,947	0,945	0,944	0,943
19	0,942	0,941	0,940	0,938	0,937	0,936	0,935	0,934	0,933	0,931
20	0,930	0,929	0,928	0,927	0,926	0,924	0,923	0,922	0,921	0,920
21	0,919	0,917	0,916	0,915	0,914	0,913	0,912	0,910	0,909	0,908
22	0,907	0,906	0,905	0,903	0,902	0,901	0,900	0,899	0,898	0,896
23	0,895	0,894	0,893	0,892	0,891	0,890	0,888	0,887	0,886	0,885
24	0,884	0,882	0,881	0,880	0,879	0,878	0,877	0,876	0,874	0,873
25	0,872	0,871	0,870	0,869	0,867	0,866	0,865	0,864	0,863	0,862
26	0,860	0,859	0,858	0,857	0,856	0,855	0,853	0,852	0,851	0,850
27	0,849	0,848	0,847	0,845	0,844	0,843	0,842	0,841	0,840	0,838
28	0,837	0,836	0,835	0,833	0,832	0,831	0,830	0,829	0,828	0,827
29	0,826	0,824	0,823	0,822	0,821	0,820	0,819	0,817	0,816	0,815
30	0,814	0,813	0,812	0,810	0,809	0,808	0,807	0,806	0,805	0,803
31	0,802	0,801	0,800	0,799	0,798	0,797	0,795	0,794	0,793	0,792
32	0,791	0,790	0,788	0,787	0,786	0,785	0,784	0,783	0,781	0,780
33	0,779	0,778	0,777	0,776	0,774	0,773	0,772	0,771	0,770	0,769
34	0,767	0,766	0,765	0,764	0,763	0,762	0,760	0,759	0,758	0,757
35	0,756	0,755	0,753	0,752	0,751	0,750	0,749	0,748	0,747	0,745
36	0,744	0,743	0,742	0,741	0,740	0,738	0,737	0,736	0,735	0,734
37	0,733	0,731	0,730	0,729	0,728	0,727	0,726	0,724	0,723	0,722
38	0,721	0,720	0,719	0,717	0,716	0,715	0,714	0,713	0,712	0,710
39	0,709	0,708	0,707	0,706	0,705	0,703	0,702	0,701	0,700	0,699
40	0,698	0,697	0,695	0,694	0,693	0,692	0,691	0,690	0,688	0,687

	0	1	2	3	4	5	6	7	8	9
41	0,686	0,685	0,684	0,683	0,681	0,680	0,679	0,678	0,677	0,676
42	0,674	0,673	0,672	0,671	0,670	0,669	0,667	0,666	0,665	0,664
43	0,663	0,662	0,660	0,659	0,658	0,657	0,656	0,655	0,653	0,652
44	0,651	0,650	0,649	0,648	0,647	0,645	0,644	0,643	0,642	0,641
45	0,640	0,638	0,637	0,636	0,635	0,634	0,633	0,631	0,630	0,629
46	0,628	0,627	0,626	0,624	0,623	0,622	0,621	0,620	0,619	0,617
47	0,616	0,615	0,614	0,613	0,612	0,610	0,609	0,608	0,607	0,606
48	0,605	0,603	0,602	0,601	0,600	0,599	0,598	0,597	0,595	0,594
49	0,593	0,592	0,591	0,590	0,588	0,587	0,586	0,585	0,584	0,583
50	0,581	0,580	0,579	0,578	0,577	0,576	0,574	0,573	0,572	0,571
51	0,570	0,569	0,567	0,566	0,565	0,564	0,563	0,562	0,560	0,559
52	0,558	0,557	0,556	0,555	0,553	0,552	0,551	0,550	0,549	0,548
53	0,547	0,545	0,544	0,543	0,542	0,541	0,540	0,538	0,537	0,536
54	0,535	0,534	0,533	0,531	0,530	0,529	0,528	0,527	0,526	0,524
55	0,523	0,522	0,521	0,520	0,519	0,517	0,516	0,515	0,514	0,513

11. ARVUDE 1 KUNI 999 KUUDUD

	0	1	2	3	4	5	6	7	8	9
0	0	1	4	9	16	25	36	49	64	81
1	100	121	144	169	196	225	256	289	324	361
2	400	441	484	529	576	625	676	729	784	841
3	900	961	1024	1089	1156	1225	1296	1369	1444	1521
4	1600	1681	1764	1849	1936	2025	2116	2209	2304	2401
5	2500	2601	2704	2809	2916	3025	3136	3249	3364	3481
6	3600	3721	3844	3969	4096	4225	4356	4489	4624	4761
7	4900	5041	5184	5329	5476	5625	5776	5929	6084	6241
8	6400	6561	6724	6889	7056	7225	7396	7569	7744	7921
9	8100	8281	8464	8649	8836	9025	9216	9409	9604	9801
10	10000	10201	10404	10609	10816	11025	11236	11449	11664	11881
11	12100	12321	12544	12769	12996	13225	13456	13689	13924	14161
12	14400	14641	14884	15129	15376	15625	15876	16129	16384	16641
13	16900	17161	17424	17689	17956	18225	18496	18769	19044	19321
14	19600	19881	20164	20449	20736	21025	21316	21609	21904	22201
15	22500	22801	23104	23409	23716	24025	24336	24649	24964	25281
16	25600	25921	26244	26569	26896	27225	27556	27889	28224	28561
17	28900	29241	29584	29929	30276	30625	30976	31329	31684	32041
18	32400	32761	33124	33489	33856	34225	34596	34969	35344	35721
19	36100	36481	36864	37249	37636	38025	38416	38809	39204	39601
20	40000	40401	40804	41209	41616	42025	42436	42849	43264	43681
21	44100	44521	44944	45369	45796	46225	46656	47089	47524	47961
22	48400	48841	49284	49729	50176	50625	51076	51529	51984	52441
23	52900	53361	53824	54289	54756	55225	55696	56169	56644	57121
24	57600	58081	58564	59049	59536	60025	60516	61009	61504	62001

	0	1	2	3	4	5	6	7	8	9
25	62500	63001	63504	64009	64516	65026	65536	66049	66564	67081
26	67600	68121	68644	69169	69696	70226	70756	71289	71824	72361
27	72900	73441	73984	74529	75076	75626	76176	76729	77284	77841
28	78400	78961	79524	80089	80656	81226	81796	82369	82944	83521
29	84100	84681	85264	85849	86436	87026	87616	88209	88804	89401
30	90000	90601	91204	91809	92416	93026	93636	94249	94864	95481
31	96100	96721	97344	97969	98596	99226	99856	100489	101124	101761
32	102400	103041	103684	104329	104976	105626	106276	106929	107584	108241
33	108900	109561	110224	110889	111556	112226	112896	113569	114244	114921
34	116500	116281	116964	117649	118336	119026	119716	120409	121104	121801
35	122500	123201	123904	124609	125316	126026	126736	127449	128164	128881
36	129600	130321	131044	131769	132496	133226	133956	134689	135424	136161
37	136900	137641	138384	139129	139876	140626	141376	142129	142884	143641
38	144400	145161	145924	146689	147456	148226	148996	149769	150544	151321
39	152100	152881	153664	154449	155236	156026	156816	157609	158404	159201
40	160000	160801	161604	162409	163216	164026	164836	165649	166464	167281
41	168100	168921	169744	170569	171396	172226	173056	173889	174724	175561
42	176400	177241	178084	178929	179776	180626	181476	182329	183184	184041
43	184900	185761	186624	187489	188356	189226	190096	190969	191844	192721
44	193600	194481	195364	196249	197136	198026	198916	199809	200704	201601
45	202500	203401	204304	205209	206116	207026	207936	208849	209764	210681
46	211600	212521	213444	214369	215296	216226	217156	218089	219024	219961
47	220900	221841	222784	223729	224676	225626	226576	227529	228484	229441
48	230400	231361	232324	233289	234256	235226	236196	237169	238144	239121
49	240100	241081	242064	243049	244036	245026	246016	247009	248004	249001

	0	1	2	3	4	5	6	7	8	9
50	250000	251001	252004	253009	254016	255025	256036	257049	258064	259081
51	260100	261121	262144	263169	264196	265225	266256	267289	268324	269361
52	270400	271441	272484	273529	274576	275625	276676	277729	278784	279841
53	280900	281961	283024	284089	285166	286225	287296	288369	289444	290521
54	291600	292681	293764	294849	295936	297025	298116	299209	300304	301401
55	302500	303601	304704	305809	306916	308025	309136	310249	311364	312481
56	313600	314721	315844	316969	318096	319225	320356	321489	322624	323761
57	324900	326041	327184	328329	329476	330625	331776	332929	334084	335241
58	336400	337561	338724	339889	341056	342225	343396	344569	345744	346921
59	348100	349281	350464	351649	352836	354025	355216	356409	357604	358801
60	360000	361201	362404	363609	364816	366025	367236	368449	369664	370881
61	372100	373321	374544	375769	376996	378225	379456	380689	381924	383161
62	384400	385641	386884	388129	389376	390625	391876	393129	394384	395641
63	396900	398161	399424	400689	401956	403225	404496	405769	407044	408321
64	409600	410881	412164	413449	414736	416025	417316	418609	419904	421201
65	422500	423801	425104	426409	427716	429025	430336	431649	432964	434281
66	435600	436921	438244	439569	440896	442225	443556	444889	446224	447561
67	448900	450241	451584	452929	454276	455625	456976	458329	459684	461041
68	462400	463761	465124	466489	467856	469225	470596	471969	473344	474721
69	476100	477481	478864	480249	481636	483025	484416	485809	487204	488601
70	490000	491401	492804	494209	495616	497025	498436	499849	501264	502681
71	504100	505521	506944	508369	509796	511225	512656	514089	515524	516961
72	518400	519841	521284	522729	524176	525625	527076	528529	529984	531441
73	532900	534361	535824	537289	538756	540225	541696	543169	544644	546121
74	547600	549081	550564	552049	553536	555025	556516	558009	559504	561001

	0	1	2	3	4	5	6	7	8	9
75	562500	564001	565504	567009	568516	570025	571536	573049	574564	576081
76	577600	579121	580644	582169	583696	585225	586756	588289	589824	591361
77	592900	594441	595984	597529	599076	600625	602176	603729	605284	606841
78	608400	609961	611524	613089	614656	616225	617796	619369	620944	622521
79	624100	625681	627264	628849	630436	632025	633616	635209	636804	638401
80	640000	641601	643204	644809	646416	648025	649636	651249	652864	654481
81	656100	657721	659344	660969	662596	664225	665856	667489	669124	670761
82	672400	674041	675684	677329	678976	680625	682276	683929	685584	687241
83	688900	690561	692224	693889	695556	697225	698896	700569	702244	703921
84	705600	707281	708964	710649	712336	714025	715716	717409	719104	720801
85	722500	724201	725904	727609	729316	731025	732736	734449	736164	737881
86	739600	741321	743044	744769	746496	748225	749956	751689	753424	755161
87	756900	758641	760384	762129	763876	765625	767376	769129	770884	772641
88	774400	776161	777924	779689	781456	783225	784996	786769	788544	790321
89	792100	793881	795664	797449	799236	801025	802816	804609	806404	808201
90	810000	811801	813604	815409	817216	819025	820836	822649	824464	826281
91	828100	829921	831744	833569	835396	837225	839056	840889	842724	844561
92	846400	848241	850084	851929	853776	855625	857476	859329	861184	863041
93	864900	866761	868624	870489	872356	874225	876096	877969	879844	881721
94	883600	885481	887364	889249	891136	893025	894916	896809	898704	900601
95	902500	904401	906304	908209	910116	912025	913936	915849	917764	919681
96	921600	923521	925444	927369	929296	931225	933156	935089	937024	938961
97	940900	942841	944784	946729	948676	950625	952576	954529	956484	958441
98	960400	962361	964324	966289	968256	970225	972196	974169	976144	978121
99	980100	982081	984064	986049	988036	990025	992016	994009	996004	998001

12. ARVUDE 1 KUNI 2499 RUUTJUURED

	0	1	2	3	4	5	6	7	8	9
0	0	1,000	1,414	1,732	2,000	2,236	2,450	2,646	2,828	3,000
1	3,162	3,317	3,464	3,606	3,742	3,873	4,000	4,123	4,243	4,359
2	4,472	4,583	4,690	4,796	4,899	5,000	5,099	5,196	5,292	5,385
3	5,477	5,568	5,657	5,745	5,831	5,916	6,000	6,083	6,164	6,245
4	6,325	6,408	6,481	6,558	6,633	6,708	6,782	6,856	6,928	7,000
5	7,071	7,141	7,211	7,280	7,348	7,416	7,483	7,550	7,616	7,681
6	7,746	7,810	7,874	7,937	8,000	8,062	8,124	8,185	8,246	8,307
7	8,367	8,426	8,485	8,544	8,602	8,660	8,718	8,775	8,832	8,888
8	8,944	9,000	9,055	9,110	9,165	9,220	9,274	9,327	9,381	9,434
9	9,487	9,539	9,592	9,644	9,695	9,747	9,798	9,849	9,900	9,950
10	10,000	10,050	10,100	10,140	10,199	10,247	10,296	10,345	10,393	10,441
11	10,489	10,536	10,583	10,630	10,677	10,724	10,770	10,817	10,863	10,909
12	10,954	11,000	11,045	11,091	11,136	11,180	11,225	11,269	11,314	11,358
13	11,402	11,446	11,489	11,533	11,576	11,619	11,662	11,705	11,747	11,790
14	11,832	11,874	11,916	11,958	12,000	12,042	12,083	12,124	12,166	12,207
15	12,247	12,288	12,329	12,369	12,410	12,450	12,490	12,530	12,570	12,610
16	12,649	12,689	12,728	12,767	12,806	12,845	12,884	12,923	12,961	13,000
17	13,038	13,077	13,115	13,153	13,191	13,229	13,266	13,304	13,342	13,379
18	13,416	13,454	13,491	13,528	13,565	13,601	13,638	13,675	13,711	13,748
19	13,784	13,820	13,856	13,892	13,928	13,964	14,000	14,036	14,071	14,107
20	14,143	14,177	14,212	14,248	14,283	14,318	14,353	14,387	14,422	14,457
21	14,491	14,526	14,560	14,595	14,629	14,663	14,697	14,731	14,765	14,799
22	14,832	14,866	14,900	14,933	14,967	15,000	15,033	15,067	15,100	15,133
23	15,166	15,199	15,232	15,264	15,297	15,330	15,362	15,395	15,427	15,460
24	15,492	15,524	15,556	15,588	15,620	15,652	15,684	15,716	15,748	15,780
25	15,811	15,843	15,875	15,906	15,937	15,969	16,000	16,031	16,062	16,093
26	16,125	16,155	16,186	16,217	16,248	16,279	16,310	16,340	16,371	16,401
27	16,432	16,462	16,493	16,523	16,553	16,583	16,613	16,643	16,673	16,703
28	16,733	16,763	16,793	16,823	16,852	16,882	16,912	16,941	16,970	17,000
29	17,030	17,059	17,088	17,117	17,146	17,176	17,205	17,234	17,263	17,292
30	17,321	17,350	17,378	17,407	17,436	17,464	17,493	17,521	17,550	17,578
31	17,607	17,635	17,664	17,692	17,720	17,748	17,776	17,804	17,833	17,860
32	17,889	17,916	17,944	17,972	18,000	18,028	18,055	18,083	18,111	18,138
33	18,166	18,193	18,221	18,248	18,276	18,303	18,330	18,358	18,385	18,412
34	18,440	18,466	18,493	18,520	18,547	18,574	18,601	18,628	18,655	18,682
35	18,708	18,735	18,762	18,788	18,815	18,841	18,868	18,894	18,920	18,947
36	18,974	19,000	19,026	19,053	19,079	19,105	19,131	19,157	19,183	19,209

	0	1	2	3	4	5	6	7	8	9
37	19,235	19,261	19,287	19,313	19,339	19,365	19,391	19,416	19,442	19,468
38	19,494	19,519	19,545	19,570	19,596	19,621	19,647	19,672	19,698	19,723
39	19,748	19,774	19,799	19,824	19,849	19,875	19,900	19,925	19,950	19,975
40	20,000	20,025	20,050	20,075	20,100	20,125	20,149	20,174	20,199	20,224
41	20,248	20,273	20,298	20,322	20,347	20,372	20,396	20,421	20,445	20,469
42	20,494	20,518	20,543	20,567	20,591	20,616	20,640	20,664	20,688	20,712
43	20,736	20,761	20,785	20,809	20,833	20,857	20,881	20,905	20,928	20,952
44	20,976	21,000	21,024	21,048	21,071	21,095	21,119	21,142	21,166	21,190
45	21,213	21,237	21,260	21,284	21,307	21,331	21,354	21,378	21,401	21,424
46	21,448	21,471	21,494	21,517	21,541	21,564	21,587	21,610	21,633	21,656
47	21,679	21,703	21,726	21,749	21,772	21,794	21,817	21,841	21,863	21,886
48	21,909	21,932	21,954	21,977	22,000	22,023	22,045	22,068	22,091	22,113
49	22,136	22,159	22,181	22,204	22,226	22,249	22,271	22,293	22,316	22,338
50	22,361	22,383	22,405	22,428	22,450	22,472	22,494	22,517	22,539	22,561
51	22,583	22,605	22,627	22,650	22,672	22,694	22,716	22,738	22,760	22,782
52	22,804	22,825	22,847	22,869	22,891	22,913	22,935	22,956	22,978	23,000
53	23,022	23,043	23,065	23,087	23,108	23,130	23,152	23,173	23,195	23,216
54	23,238	23,259	23,281	23,302	23,324	23,345	23,367	23,388	23,409	23,431
55	23,452	23,473	23,495	23,516	23,537	23,558	23,580	23,601	23,622	23,643
56	23,664	23,685	23,707	23,728	23,749	23,770	23,791	23,812	23,833	23,854
57	23,875	23,896	23,917	23,937	23,958	23,979	24,000	24,021	24,042	24,062
58	24,083	24,104	24,125	24,145	24,166	24,187	24,207	24,228	24,249	24,269
59	24,290	24,310	24,331	24,352	24,372	24,393	24,413	24,434	24,454	24,474
60	24,495	24,515	24,536	24,556	24,576	24,597	24,617	24,637	24,658	24,678
61	24,698	24,719	24,739	24,759	24,779	24,800	24,820	24,840	24,860	24,880
62	24,900	24,920	24,940	24,960	24,980	25,000	25,020	25,040	25,060	25,080
63	25,100	25,120	25,140	25,160	25,180	25,200	25,220	25,239	25,259	25,279
64	25,298	25,318	25,338	25,358	25,377	25,397	25,417	25,436	25,456	25,476
65	25,495	25,515	25,534	25,554	25,574	25,593	25,613	25,632	25,652	25,671
66	25,691	25,710	25,729	25,749	25,769	25,788	25,807	25,826	25,846	25,865
67	25,884	25,904	25,923	25,942	25,962	25,981	26,000	26,019	26,039	26,058
68	26,077	26,096	26,115	26,134	26,153	26,173	26,192	26,211	26,230	26,249
69	26,268	26,287	26,306	26,325	26,344	26,363	26,382	26,401	26,420	26,439
70	26,458	26,476	26,495	26,514	26,533	26,552	26,571	26,590	26,609	26,628
71	26,646	26,665	26,683	26,702	26,721	26,740	26,758	26,777	26,796	26,814
72	26,833	26,852	26,870	26,889	26,907	26,926	26,944	26,963	26,982	27,000

	0	1	2	3	4	5	6	7	8	9
73	27,019	27,087	27,056	27,074	27,092	27,111	27,129	27,148	27,166	27,185
74	27,203	27,221	27,240	27,258	27,276	27,295	27,313	27,332	27,350	27,368
75	27,386	27,404	27,423	27,441	27,459	27,477	27,495	27,514	27,532	27,550
76	27,568	27,586	27,604	27,622	27,641	27,659	27,677	27,695	27,713	27,731
77	27,749	27,767	27,785	27,803	27,821	27,839	27,857	27,875	27,893	27,911
78	27,929	27,946	27,964	27,982	28,000	28,018	28,036	28,054	28,071	28,089
79	28,107	28,125	28,143	28,160	28,178	28,196	28,214	28,231	28,249	28,267
80	28,284	28,302	28,320	28,337	28,355	28,373	28,390	28,408	28,425	28,443
81	28,461	28,478	28,496	28,513	28,531	28,548	28,566	28,583	28,601	28,618
82	28,636	28,653	28,671	28,688	28,705	28,723	28,740	28,758	28,775	28,792
83	28,810	28,827	28,844	28,862	28,879	28,896	28,914	28,931	28,948	28,966
84	28,983	29,000	29,017	29,034	29,052	29,069	29,086	29,103	29,120	29,138
85	29,155	29,172	29,189	29,206	29,223	29,240	29,257	29,275	29,292	29,309
86	29,326	29,343	29,360	29,377	29,394	29,411	29,428	29,445	29,462	29,479
87	29,496	29,513	29,530	29,547	29,563	29,580	29,597	29,614	29,631	29,648
88	29,665	29,682	29,698	29,715	29,732	29,749	29,766	29,783	29,799	29,816
89	29,833	29,850	29,866	29,883	29,900	29,917	29,933	29,950	29,967	29,983
90	30,000	30,017	30,033	30,050	30,067	30,083	30,100	30,116	30,133	30,150
91	30,167	30,183	30,199	30,216	30,232	30,249	30,265	30,282	30,299	30,315
92	30,331	30,348	30,364	30,381	30,397	30,414	30,430	30,447	30,463	30,480
93	30,496	30,512	30,529	30,545	30,561	30,578	30,594	30,610	30,627	30,643
94	30,659	30,676	30,692	30,708	30,725	30,741	30,757	30,773	30,790	30,806
95	30,822	30,838	30,854	30,871	30,887	30,903	30,919	30,935	30,952	30,968
96	30,984	31,000	31,016	31,032	31,048	31,064	31,081	31,097	31,113	31,129
97	31,145	31,161	31,177	31,193	31,209	31,225	31,241	31,257	31,273	31,289
98	31,305	31,321	31,337	31,353	31,369	31,385	31,401	31,417	31,432	31,448
99	31,464	31,480	31,496	31,512	31,528	31,544	31,559	31,575	31,591	31,607
100	31,620	31,639	31,655	31,671	31,686	31,702	31,718	31,734	31,750	31,765
101	31,781	31,797	31,812	31,828	31,844	31,860	31,875	31,891	31,907	31,922
102	31,938	31,954	31,969	31,985	32,000	32,016	32,032	32,047	32,063	32,079
103	32,094	32,110	32,125	32,141	32,156	32,172	32,187	32,203	32,219	32,234
104	32,250	32,265	32,281	32,296	32,311	32,327	32,342	32,358	32,373	32,389
105	32,404	32,419	32,435	32,450	32,466	32,481	32,496	32,512	32,527	32,542
106	32,558	32,573	32,588	32,604	32,619	32,634	32,650	32,665	32,680	32,696
107	32,711	32,726	32,742	32,757	32,772	32,787	32,803	32,818	32,833	32,848
108	32,864	32,879	32,894	32,909	32,924	32,940	32,955	32,970	32,985	33,000

	0	1	2	3	4	5	6	7	8	9
109	33,015	33,080	33,046	33,061	33,076	33,091	33,106	33,121	33,136	33,151
110	33,167	33,181	33,196	33,212	33,227	33,242	33,257	33,272	33,287	33,302
111	33,317	33,332	33,347	33,362	33,377	33,392	33,407	33,422	33,437	33,452
112	33,466	33,481	33,496	33,511	33,526	33,541	33,556	33,571	33,586	33,602
113	33,616	33,630	33,645	33,660	33,675	33,690	33,705	33,720	33,734	33,749
114	33,764	33,779	33,794	33,808	33,823	33,838	33,853	33,867	33,882	33,897
115	33,912	33,926	33,941	33,956	33,971	33,985	34,000	34,015	34,029	34,044
116	34,059	34,074	34,088	34,103	34,118	34,132	34,147	34,161	34,176	34,191
117	34,205	34,220	34,235	34,249	34,264	34,278	34,293	34,307	34,322	34,337
118	34,351	34,366	34,380	34,395	34,409	34,424	34,438	34,453	34,467	34,482
119	34,496	34,511	34,525	34,540	34,554	34,569	34,583	34,598	34,612	34,627
120	34,642	34,656	34,670	34,684	34,699	34,713	34,728	34,742	34,756	34,771
121	34,785	34,799	34,814	34,828	34,843	34,857	34,871	34,886	34,900	34,914
122	34,929	34,943	34,957	34,971	34,986	35,000	35,014	35,029	35,043	35,057
123	35,077	35,086	35,100	35,114	35,128	35,143	35,157	35,171	35,185	35,200
124	35,214	35,228	35,242	35,256	35,270	35,285	35,299	35,313	35,327	35,341
125	35,355	35,370	35,384	35,398	35,412	35,426	35,440	35,454	35,468	35,482
126	35,497	35,511	35,525	35,539	35,553	35,567	35,581	35,595	35,609	35,623
127	35,637	35,651	35,665	35,679	35,693	35,707	35,721	35,735	35,749	35,763
128	35,777	35,791	35,805	35,819	35,833	35,847	35,861	35,875	35,889	35,903
129	35,917	35,931	35,944	35,958	35,972	35,986	36,000	36,014	36,028	36,042
130	36,056	36,069	36,083	36,097	36,111	36,125	36,139	36,153	36,166	36,180
131	36,194	36,208	36,222	36,235	36,249	36,263	36,277	36,291	36,304	36,318
132	36,332	36,346	36,359	36,373	36,387	36,401	36,414	36,428	36,442	36,456
133	36,469	36,483	36,497	36,510	36,524	36,538	36,551	36,565	36,579	36,592
134	36,606	36,620	36,633	36,647	36,661	36,674	36,688	36,702	36,715	36,729
135	36,742	36,756	36,770	36,783	36,797	36,810	36,824	36,838	36,851	36,865
136	36,878	36,892	36,905	36,919	36,932	6,946	36,960	36,973	36,987	37,000
137	37,014	37,027	37,041	37,054	37,068	37,081	37,095	37,108	37,122	37,135
138	37,148	37,162	37,175	37,189	37,202	37,216	37,229	37,243	37,256	37,269
139	37,283	37,296	37,310	37,323	37,336	37,350	37,363	37,376	37,390	37,403
140	37,417	37,430	37,444	37,457	37,470	37,483	37,497	37,510	37,523	37,537
141	37,550	37,563	37,577	37,590	37,603	37,617	37,630	37,643	37,656	37,670
142	37,683	37,696	37,710	37,723	37,736	37,749	37,762	37,776	37,789	37,802
143	37,814	37,829	37,842	37,855	37,868	37,881	37,895	37,908	37,921	37,934
144	37,947	37,961	37,974	37,987	38,000	38,013	38,026	38,040	38,053	38,066

	0	1	2	3	4	5	6	7	8	9
145	38,079	38,092	38,105	38,118	38,131	38,144	38,158	38,171	38,184	38,197
146	38,210	38,223	38,236	38,249	38,262	38,275	38,288	38,301	38,315	38,328
147	38,341	38,354	38,367	38,380	38,393	38,406	38,419	38,432	38,445	38,458
148	38,471	38,484	38,497	38,510	38,523	38,536	38,549	38,562	38,575	38,588
149	38,601	38,613	38,626	38,639	38,652	38,665	38,678	38,691	38,704	38,716
150	38,730	38,743	38,756	38,769	38,781	38,794	38,807	38,820	38,833	38,846
151	38,859	38,872	38,884	38,897	38,910	38,923	38,936	38,949	38,962	38,974
152	38,987	39,000	39,013	39,026	39,038	39,051	39,064	39,077	39,090	39,102
153	39,115	39,128	39,141	39,154	39,166	39,179	39,192	39,205	39,217	39,230
154	39,243	39,256	39,268	39,281	39,294	39,306	39,319	39,332	39,345	39,357
155	39,370	39,383	39,395	39,408	39,421	39,433	39,446	39,459	39,472	39,484
156	39,497	39,509	39,522	39,535	39,547	39,560	39,573	39,585	39,598	39,611
157	39,623	39,636	39,648	39,661	39,674	39,686	39,699	39,711	39,724	39,737
158	39,749	39,762	39,774	39,787	39,800	39,812	39,825	39,837	39,850	39,862
159	39,875	39,887	39,900	39,912	39,925	39,937	39,950	39,962	39,975	39,988
160	40,000	40,013	40,025	40,037	40,050	40,063	40,075	40,088	40,100	40,112
161	40,125	40,137	40,150	40,162	40,175	40,187	40,200	40,212	40,224	40,237
162	40,249	40,262	40,274	40,286	40,299	40,311	40,324	40,336	40,348	40,361
163	40,373	40,386	40,398	40,410	40,423	40,435	40,448	40,460	40,472	40,485
164	40,497	40,509	40,522	40,534	40,546	40,559	40,571	40,583	40,596	40,608
165	40,620	40,633	40,645	40,657	40,669	40,682	40,694	40,706	40,719	40,731
166	40,743	40,755	40,768	40,780	40,792	40,804	40,817	40,829	40,841	40,853
167	40,866	40,878	40,890	40,902	40,915	40,927	40,939	40,951	40,963	40,976
168	40,988	41,000	41,012	41,024	41,037	41,049	41,061	41,073	41,085	41,097
169	41,110	41,122	41,134	41,146	41,158	41,170	41,183	41,195	41,207	41,219
170	41,231	41,243	41,255	41,267	41,280	41,292	41,304	41,316	41,328	41,340
171	41,352	41,364	41,376	41,388	41,400	41,413	41,425	41,437	41,449	41,461
172	41,473	41,485	41,497	41,509	41,521	41,533	41,545	41,557	41,569	41,581
173	41,593	41,605	41,617	41,629	41,641	41,653	41,665	41,677	41,689	41,701
174	41,713	41,725	41,737	41,749	41,761	41,773	41,785	41,797	41,809	41,821
175	41,833	41,845	41,857	41,869	41,881	41,893	41,905	41,917	41,929	41,940
176	41,952	41,964	41,976	41,988	42,000	42,012	42,024	42,036	42,048	42,060
177	42,071	42,083	42,095	42,107	42,119	42,131	42,143	42,155	42,166	42,178
178	42,190	42,202	42,214	42,226	42,237	42,249	42,261	42,273	42,285	42,297
179	42,308	42,320	42,332	42,344	42,356	42,367	42,379	42,391	42,403	42,415
180	42,427	42,439	42,450	42,462	42,474	42,485	42,497	42,509	42,521	42,532

	0	1	2	3	4	5	6	7	8	9
181	42,544	42,556	42,568	42,579	42,591	42,603	42,615	42,626	42,638	42,650
182	42,661	42,673	42,685	42,697	42,708	42,720	42,732	42,743	42,755	42,767
183	42,779	42,790	42,802	42,814	42,825	42,837	42,849	42,860	42,872	42,884
184	42,895	42,907	42,919	42,930	42,942	42,953	42,965	42,977	42,988	43,000
185	43,012	43,023	43,035	43,047	43,058	43,070	43,081	43,093	43,105	43,116
186	43,128	43,139	43,151	43,163	43,174	43,186	43,197	43,209	43,220	43,232
187	43,244	43,255	43,267	43,278	43,290	43,301	43,313	43,324	43,336	43,347
188	43,369	43,371	43,382	43,394	43,405	43,417	43,428	43,440	43,451	43,463
189	43,474	43,486	43,497	43,509	43,520	43,532	43,543	43,555	43,566	43,578
190	43,589	43,601	43,612	43,623	43,635	43,646	43,658	43,669	43,681	43,692
191	43,704	43,715	43,726	43,738	43,749	43,761	43,772	43,784	43,795	43,806
192	43,818	43,829	43,841	43,852	43,863	43,875	43,886	43,898	43,909	43,920
193	43,932	43,943	43,955	43,966	43,977	43,989	44,000	44,011	44,023	44,034
194	44,045	44,057	44,068	44,080	44,091	44,102	44,114	44,125	44,136	44,148
195	44,159	44,170	44,181	44,193	44,204	44,215	44,227	45,238	44,249	44,261
196	44,272	44,283	44,295	44,306	44,317	44,328	44,340	44,351	44,362	44,373
197	44,385	44,396	44,407	44,419	44,430	44,441	44,452	44,464	44,475	44,486
198	44,497	44,508	44,520	44,531	44,542	44,553	44,565	44,576	44,587	44,598
199	44,609	44,621	44,632	44,643	44,654	44,665	44,677	44,688	44,699	44,710
200	44,722	44,733	44,744	44,755	44,766	44,777	44,788	44,800	44,811	44,822
201	44,833	44,844	44,855	44,867	44,878	44,889	44,900	44,911	44,922	44,933
202	44,944	44,955	44,967	44,978	44,989	45,000	45,011	45,022	45,033	45,044
203	45,056	45,067	45,078	45,089	45,100	45,111	45,122	45,133	45,144	45,155
204	45,166	45,177	45,189	45,200	45,211	45,222	45,233	45,244	45,255	45,266
205	45,277	45,288	45,299	45,310	45,321	45,332	45,343	45,354	45,365	45,376
206	45,387	45,398	45,409	45,420	45,431	45,442	45,453	45,464	45,475	45,486
207	45,497	45,508	45,519	45,530	45,541	45,552	45,563	45,574	45,585	45,596
208	45,607	45,618	45,629	45,640	45,651	45,662	45,673	45,684	45,695	45,706
209	45,717	45,728	45,738	45,749	45,760	45,771	45,782	45,793	45,804	45,815
210	45,826	45,837	45,848	45,859	45,869	45,880	45,891	45,902	45,913	45,924
211	45,935	45,946	45,957	45,967	45,978	45,989	46,000	46,011	46,022	46,033
212	46,044	46,054	46,065	46,076	46,087	46,098	46,109	46,119	46,130	46,141
213	46,152	46,163	46,174	46,184	46,195	46,206	46,217	46,228	46,239	46,249
214	46,260	46,271	46,282	46,293	46,303	46,314	46,325	46,336	46,347	46,357
215	46,368	46,379	46,390	46,400	46,411	46,422	46,433	46,444	46,454	46,465
216	46,476	46,487	46,497	46,508	46,519	46,530	46,540	46,551	46,562	46,573

	0	1	2	3	4	5	6	7	8	9
217	46,583	46,594	46,605	46,616	46,626	46,637	46,648	46,659	46,668	46,680
218	46,690	46,701	46,712	46,723	46,733	46,744	46,755	46,765	46,776	46,787
219	46,798	46,808	46,819	46,830	46,840	46,851	46,862	46,872	46,883	46,894
220	46,904	46,915	46,926	46,936	46,947	46,958	46,968	46,979	46,989	47,000
221	47,010	47,021	47,032	47,043	47,053	47,064	47,074	47,085	47,096	47,106
222	47,117	47,128	47,138	47,149	47,159	47,170	47,181	47,191	47,202	47,212
223	47,223	47,234	47,244	47,255	47,265	47,276	47,286	47,297	47,308	47,318
224	47,329	47,339	47,350	47,360	47,371	47,382	47,392	47,403	47,413	47,424
225	47,435	47,445	47,455	47,466	47,476	47,487	47,497	47,508	47,518	47,529
226	47,540	47,550	47,561	47,571	47,582	47,592	47,603	47,613	47,624	47,634
227	47,645	47,655	47,666	47,676	47,687	47,697	47,708	47,718	47,728	47,739
228	47,749	47,760	47,770	47,781	47,791	47,802	47,812	47,823	47,833	47,844
229	47,854	47,864	47,875	47,885	47,896	47,906	47,917	47,927	47,938	47,948
230	47,959	47,969	47,979	47,990	48,000	48,010	48,021	48,031	48,042	48,052
231	48,063	48,073	48,083	48,094	48,104	48,115	48,125	48,135	48,146	48,156
232	48,166	48,177	48,187	48,198	48,208	48,218	48,229	48,239	48,249	48,260
233	48,270	48,281	48,291	48,301	48,312	48,322	48,332	48,343	48,353	48,363
234	48,374	48,384	48,394	48,405	48,415	48,425	48,436	48,446	48,456	48,467
235	48,477	48,487	48,498	48,508	48,518	48,528	48,539	48,549	48,559	48,570
236	48,580	48,590	48,600	48,611	48,621	48,631	48,642	48,652	48,662	48,672
237	48,683	48,693	48,703	48,714	48,724	48,734	48,744	48,755	48,765	48,775
238	48,785	48,796	48,806	48,816	48,826	48,837	48,847	48,857	48,867	48,877
239	48,888	48,898	48,908	48,918	48,929	48,939	48,949	48,959	48,969	48,980
240	48,990	49,000	49,010	49,020	49,031	49,041	49,051	49,061	49,071	49,082
241	49,092	49,102	49,112	49,122	49,133	49,143	49,153	49,163	49,173	49,183
242	49,194	49,204	49,214	49,224	49,234	49,244	49,255	49,265	49,275	49,285
243	49,295	49,305	49,315	49,326	49,336	49,346	49,356	49,366	49,376	49,386
244	49,396	49,407	49,417	49,427	49,437	49,447	49,457	49,467	49,477	49,487
245	49,498	49,508	49,518	49,528	49,538	49,548	49,558	49,568	49,578	49,588
246	49,598	49,609	49,619	49,629	49,639	49,649	49,659	49,669	49,679	49,689
247	49,699	49,709	49,719	49,729	49,739	49,749	49,760	49,770	49,780	49,790
248	49,800	49,810	49,820	49,830	49,840	49,850	49,860	49,870	49,880	49,890
249	49,900	49,910	49,920	49,930	49,940	49,950	49,960	49,970	49,980	49,990

333-65

377

13. ARVUDE 1 KUNI 2499 PÖÖRDVÄÄRTUSED

	0	1	2	3	4	5	6	7	8	9
0	000000	100000	500000	333333	250000	200000	166667	142857	125000	111111
1	100000	909091	833333	769231	714286	666667	625000	588235	555556	526316
2	500000	476190	454545	434783	416667	400000	384615	370370	357143	344828
3	333333	322581	312500	303030	294118	285714	277778	270270	263158	256410
4	250000	243902	238095	232558	227273	222222	217391	212766	208333	204082
5	200000	196078	192308	188679	185185	181818	178571	175438	172414	169492
6	166667	163934	161290	158730	156250	153846	151515	149254	147059	144928
7	142857	140845	138889	136986	135135	133333	131579	129870	128205	126582
8	125000	123457	121951	120482	119048	117647	116279	114942	113636	112360
9	111111	109890	108696	107527	106383	105263	104167	103093	102041	101010
10	100000	990099	980392	970874	961538	952381	943396	934579	925926	917431
11	909091	900901	892857	884956	877193	869565	862069	854701	847458	840336
12	833333	826446	819672	813008	806452	800000	793651	787402	781250	775194
13	769231	763359	757576	751880	746269	740741	735294	729927	724638	719424
14	714286	709220	704225	699301	694444	689655	684932	680272	675676	671141
15	666667	662252	657895	653595	649351	645161	641026	636943	632911	628931
16	625000	621118	617284	613497	609756	606061	602410	598802	595238	591716
17	588235	584795	581395	578035	574713	571428	568182	564972	561798	558659
18	555556	552486	549450	546448	543478	540540	537634	534759	531915	529100
19	526316	523560	520833	518135	515464	512820	510204	507614	505050	502512
20	500000	497512	495050	492611	490196	487805	485437	483092	480769	478469
21	476190	473934	471698	469484	467290	465116	462963	460829	458716	456621
22	454545	452489	450450	448430	446428	444444	442478	440529	438596	436681
23	434783	432900	431034	429184	427350	425532	423729	421941	420168	418410
24	416667	414938	413223	411523	409836	408163	406504	404858	403226	401606
25	400000	398406	396825	395257	393701	392157	390625	389105	387597	386100
26	384615	383142	381679	380228	378788	377358	375940	374532	373134	371747
27	370370	369004	367647	366300	364964	363636	362319	361011	359712	358423
28	357143	355872	354610	353357	352113	350877	349650	348432	347222	346021
29	344828	343643	342466	341297	340136	338983	337838	336700	335570	334448
30	333333	332226	331126	330033	328947	327869	326797	325733	324675	323624
31	322581	321543	320513	319489	318471	317460	316456	315457	314465	313480
32	312500	311526	310559	309598	308642	307692	306748	305810	304878	303951
33	303030	302115	301205	300300	299401	298507	297619	296736	295858	294985
34	294118	293255	292398	291545	290698	289855	289017	288184	287356	286533
35	285714	284900	284091	283286	282486	281690	280899	280112	279330	278552
36	277778	277008	276243	275482	274725	273973	273224	272480	271739	271003

15.64

	0	1	2	3	4	5	6	7	8	9
27	270270	269542	268817	268096	267380	266667	265957	265252	264550	263852
38	263158	262467	261780	261097	260417	259740	259067	258398	257732	257069
39	256410	255754	255102	254453	253807	253164	252525	251889	251256	250626
40	250000	249376	248756	248139	247525	246914	246305	245700	245098	244499
41	243902	243309	242718	242131	241546	240964	240385	239808	239234	238663
42	238095	237530	236967	236407	235849	235294	234742	234192	233645	233100
43	232558	232018	231481	230947	230415	229885	229358	228833	228310	227790
44	227273	226757	226244	225734	225225	224719	224215	223714	223214	222717
45	222222	221729	221239	220750	220264	219780	219298	218818	218341	217865
46	217391	216920	216450	215983	215517	215054	214592	214133	213675	213220
47	212766	212314	211864	211416	210970	210526	210084	209644	209205	208768
48	208333	207900	207469	207039	206612	206186	205761	205339	204918	204499
49	204082	203666	203252	202840	202429	202020	201613	201207	200803	200401
50	200000	199601	199203	198807	198413	198020	197628	197239	196850	196464
51	196078	195695	195312	194932	194552	194175	193798	193424	193050	192678
52	192308	191938	191571	191204	190840	190476	190114	189753	189394	189036
53	188679	188324	187970	187617	187266	186916	186567	186220	185874	185529
54	185185	184843	184502	184162	183824	183486	183150	182815	182482	182149
55	181818	181488	181159	180832	180505	180180	179856	179533	179211	178891
56	178571	178253	177936	177620	177305	176991	176678	176367	176056	175747
57	175438	175131	174825	174520	174216	173913	173611	173310	173010	172712
58	172414	172117	171821	171526	171233	170940	170648	170358	170068	169779
59	169492	169205	168919	168634	168350	168067	167785	167504	167224	166945
60	166667	166389	166113	165837	165563	165289	165016	164745	164474	164204
61	163934	163666	163399	163132	162866	162602	162338	162074	161812	161551
62	161290	161030	160772	160514	160256	160000	159744	159490	159236	158982
63	158730	158479	158228	157978	157729	157480	157233	156986	156740	156494
64	156250	156006	155763	155521	155280	155039	154799	154560	154321	154083
65	153846	153610	153374	153139	152905	152672	152439	152207	151976	151745
66	151515	151286	151057	150830	150602	150376	150150	149925	149700	149477
67	149254	149031	148810	148588	148368	148148	147929	147710	147493	147275
68	147059	146843	146628	146413	146199	145985	145772	145560	145349	145138
69	144928	144718	144509	144300	144092	143885	143678	143472	143266	143062
70	142857	142653	142450	142248	142045	141844	141643	141443	141243	141044
71	140845	140647	140449	140252	140056	139860	139665	139470	139276	139082
72	138889	138696	138504	138312	138122	137931	137741	137552	137363	137174

	0	1	2	3	4	5	6	7	8	9
73	136986	136799	136612	136426	136240	136054	135870	135685	135501	135318
74	135135	134953	134771	134590	134409	134228	134048	133869	133690	133511
75	133333	133156	132979	132802	132626	132450	132275	132100	131926	131752
76	131579	131406	131234	131062	130890	130719	130548	130378	130208	130039
77	129870	129702	129534	129366	129199	129032	128866	128700	128535	128370
78	128205	128041	127877	127714	127551	127388	127226	127065	126904	126743
79	126582	126422	126263	126103	125944	125786	125628	125470	125313	125156
80	125000	124844	124688	124533	124378	124224	124069	123916	123762	123609
81	123457	123304	123153	123001	122850	122699	122549	122399	122249	122100
82	121951	121803	121654	121507	121359	121212	121065	120919	120773	120627
83	120482	120337	120192	120048	119904	119760	119617	119474	119332	119190
84	119048	118906	118765	118624	118483	118343	118203	118064	117924	117786
85	117647	117509	117371	117233	117096	116959	116822	116686	116550	116414
86	116279	116144	116009	115875	115741	115607	115473	115340	115207	115075
87	114942	114810	114679	114548	114416	114286	114155	114025	113895	113766
88	113636	113507	113379	113250	113122	112994	112867	112740	112613	112486
89	112360	112233	112108	111982	111857	111732	111607	111483	111358	111235
90	111111	110988	110865	110742	110619	110497	110375	110254	110132	110011
91	109890	109769	109649	109529	109409	109290	109170	109051	108932	108814
92	108696	108578	108460	108342	108225	108108	107991	107875	107759	107643
93	107527	107411	107296	107181	107066	106952	106838	106724	106610	106496
94	106383	106270	106157	106044	105932	105820	105708	105597	105485	105374
95	105263	105152	105042	104932	104822	104712	104602	104493	104384	104275
96	104167	104058	103950	103842	103734	103627	103520	103413	103306	103199
97	103093	102987	102881	102775	102669	102564	102459	102354	102249	102145
98	102041	101937	101833	101729	101626	101523	101420	101317	101214	101112
99	101010	100908	100806	100705	100604	100502	100402	100301	100200	100100
100	100000	999001	998004	997009	996016	995025	994036	993049	992063	991080
101	990099	989120	988142	987167	986193	985222	984252	983284	982318	981354
102	980392	979432	978474	977517	976562	975610	974659	973710	972763	971817
103	970874	969932	968992	968054	967118	966184	965251	964320	963391	962464
104	961538	960615	959693	958773	957854	956938	956023	955110	954198	953289
105	952381	951475	950570	949668	948767	947867	946970	946074	945180	944287
106	943396	942507	941620	940734	939850	938967	938086	937207	936330	935454
107	934579	933707	932836	931966	931099	930232	929368	928505	927644	926784
108	925926	925069	924214	923361	922509	921659	920810	919963	919118	918274

	0	1	2	3	4	5	6	7	8	9
109	917431	916590	915751	914913	914077	913242	912409	911577	910747	909918
110	909091	908265	907441	906618	905797	904977	904159	903342	902527	901713
111	900901	900090	899280	898472	897666	896861	896057	895255	894454	893655
112	892857	892061	891266	890472	889680	888889	888099	887311	886525	885740
113	884956	884173	883392	882612	881834	881057	880282	879507	878735	877963
114	877193	876424	875657	874891	874126	873362	872600	871840	871080	870322
115	869565	868810	868056	867303	866551	865801	865052	864304	863558	862813
116	862069	861326	860585	859845	859106	858369	857633	856898	856164	855432
117	854701	853971	853242	852515	851789	851064	850340	849618	848896	848176
118	847458	846740	846024	845308	844594	843882	843170	842460	841751	841043
119	840336	839630	838926	838223	837521	836820	836120	835422	834724	834028
120	833333	832639	831947	831255	830565	829876	829187	828500	827814	827130
121	826446	825764	825082	824402	823723	823045	822368	821693	821018	820344
122	819672	819001	818331	817661	816993	816326	815661	814996	814332	813670
123	813008	812348	811688	811030	810373	809716	809061	808407	807754	807102
124	806452	805802	805153	804505	803858	803213	802568	801925	801282	800640
125	800000	799360	798722	798084	797448	796813	796178	795545	794912	794281
126	793651	793021	792393	791766	791139	790514	789889	789266	788644	788022
127	787402	786782	786164	785546	784929	784314	783699	783085	782473	781861
128	781250	780640	780031	779423	778816	778210	777605	777001	776398	775795
129	775194	774593	773994	773395	772798	772201	771605	771010	770416	769823
130	769231	768640	768049	767460	766871	766284	765697	765111	764526	763942
131	763359	762776	762195	761615	761035	760456	759878	759301	758725	758150
132	757576	757002	756430	755858	755287	754717	754148	753580	753012	752445
133	751880	751315	750751	750188	749625	749064	748503	747943	747384	746826
134	746269	745712	745156	744602	744048	743494	742942	742390	741840	741290
135	740741	740192	739645	739098	738552	738007	737463	736920	736377	735835
136	735294	734754	734214	733676	733138	732601	732064	731529	730994	730460
137	729927	729395	728863	728332	727802	727273	726744	726216	725689	725163
138	724638	724113	723589	723066	722543	722022	721501	720980	720461	719942
139	719424	718907	718391	717875	717360	716846	716332	715820	715308	714796
140	714286	713776	713267	712758	712251	711744	711238	710732	710227	709723
141	709220	708717	708215	707714	707214	706714	706215	705716	705219	704722
142	704225	703730	703235	702741	702247	701754	701262	700771	700280	699790
143	699301	698812	698324	697837	697350	696864	696379	695894	695410	694927
144	694444	693962	693481	693001	692521	692042	691563	691085	690608	690131

	0	1	2	3	4	5	6	7	8	9
145	689655	689180	688705	688231	687758	687285	686813	686342	685871	685401
146	684932	684463	683994	683527	683060	682594	682128	681663	681199	680735
147	680272	679810	679348	678887	678426	677966	677507	677048	676590	676132
148	675676	675219	674764	674309	673854	673401	672948	672495	672043	671592
149	671141	670691	670241	669792	669344	668896	668449	668008	667567	667111
150	666667	666222	665779	665336	664894	664452	664011	663570	663130	662690
151	662252	661813	661376	660938	660502	660066	659631	659196	658762	658328
152	657895	657462	657030	656599	656168	655738	655308	654879	654450	654022
153	653595	653168	652742	652316	651890	651466	651042	650618	650195	649772
154	649351	648929	648508	648088	647668	647249	646830	646412	645995	645578
155	645161	644745	644330	643915	643501	643087	642674	642261	641848	641437
156	641026	640615	640205	639795	639386	638978	638570	638162	637755	637349
157	636943	636537	636132	635728	635324	634921	634518	634115	633714	633312
158	632911	632511	632111	631712	631313	630915	630517	630120	629723	629327
159	628931	628536	628141	627746	627352	626959	626566	626174	625782	625391
160	625000	624610	624220	623830	623441	623053	622665	622278	621890	621504
161	621118	620732	620347	619963	619579	619195	618812	618429	618047	617665
162	617284	616903	616523	616143	615764	615385	615006	614628	614251	613874
163	613497	613121	612745	612370	611995	611621	611247	610874	610501	610128
164	609756	609384	609013	608643	608272	607903	607533	607164	606796	606428
165	606061	605694	605327	604961	604595	604230	603865	603500	603136	602773
166	602410	602047	601685	601323	600962	600601	600240	599880	599520	599161
167	598802	598444	598086	597729	597372	597015	596659	596303	595948	595593
168	595238	594884	594530	594177	593824	593472	593120	592768	592417	592066
169	591716	591366	591016	590667	590319	589970	589623	589275	588928	588582
170	588235	587889	587544	587199	586854	586510	586166	585823	585480	585138
171	584795	584454	584112	583771	583430	583090	582750	582411	582072	581734
172	581395	581058	580720	580383	580046	579710	579374	579039	578704	578369
173	578035	577701	577367	577034	576701	576369	576037	575705	575374	575043
174	574713	574382	574053	573723	573394	573066	572738	572410	572082	571755
175	571428	571102	570776	570451	570125	569800	569476	569152	568828	568505
176	568182	567859	567537	567215	566893	566572	566251	565931	565611	565291
177	564972	564653	564334	564016	563698	563380	563063	562746	562430	562114
178	561798	561482	561167	560852	560538	560224	559910	559597	559284	558971
179	558659	558347	558036	557724	557414	557103	556793	556483	556174	555864
180	555556	555247	554939	554631	554324	554017	553710	553403	553097	552792

	0	1	2	3	4	5	6	7	8	9
181	552486	552181	551876	551572	551268	550964	550661	550358	550055	549753
182	549450	549149	548847	548546	548246	547945	547645	547345	547046	546747
183	546448	546150	545852	545554	545256	544959	544662	544366	544070	543774
184	543478	543183	542888	542594	542299	542005	541712	541418	541126	540833
185	540540	540248	539957	539665	539374	539084	538793	538503	538213	537924
186	537634	537346	537057	536769	536481	536193	535906	535619	535332	535045
187	534759	534474	534188	533903	533618	533333	533049	532765	532481	532198
188	531915	531632	531350	531067	530786	530504	530223	529942	529661	529381
189	529100	528821	528541	528262	527983	527704	527426	527148	526870	526593
190	526316	526039	525762	525486	525210	524934	524659	524384	524109	523834
191	523560	523286	523012	522739	522466	522193	521921	521648	521376	521105
192	520833	520562	520291	520021	519750	519480	519211	518941	518672	518403
193	518135	517866	517598	517330	517063	516796	516529	516262	515996	515730
194	515464	515198	514933	514668	514403	514139	513875	513611	513347	513084
195	512820	512558	512295	512033	511771	511509	511247	510986	510725	510464
196	510204	509944	509684	509424	509165	508906	508647	508388	508130	507872
197	507614	507357	507099	506842	506586	506329	506073	505817	505561	505306
198	505050	504796	504541	504286	504032	503778	503525	503271	503018	502765
199	502512	502260	502008	501756	501504	501253	501002	500751	500500	500250
200	500000	499750	499500	499251	499002	498753	498504	498256	498008	497760
201	497512	497265	497018	496771	496524	496278	496032	495786	495540	495295
202	495050	494804	494560	494315	494071	493827	493583	493340	493097	492854
203	492611	492368	492126	491884	491642	491400	491159	490918	490677	490436
204	490196	489956	489716	489476	489237	488998	488758	488520	488281	488043
205	487805	487567	487329	487092	486855	486618	486381	486145	485909	485673
206	485437	485201	484966	484731	484496	484262	484027	483793	483559	483325
207	483092	482858	482625	482393	482160	481928	481696	481464	481232	481000
208	480769	480538	480307	480077	479846	479616	479386	479157	478927	478698
209	478469	478240	478011	477783	477555	477327	477099	476872	476644	476417
210	476190	475964	475737	475511	475285	475059	474834	474608	474383	474158
211	473934	473709	473485	473261	473037	472813	472590	472366	472144	471921
212	471698	471476	471254	471032	470810	470588	470367	470146	469925	469704
213	469484	469263	469043	468823	468604	468384	468165	467946	467727	467508
214	467230	467071	466853	466636	466418	466200	465983	465766	465549	465333
215	465116	464900	464684	464468	464252	464037	463822	463607	463392	463177
216	462963	462749	462535	462321	462107	461894	461680	461467	461255	461042

	0	1	2	3	4	5	6	7	8	9
217	460829	460617	460405	460193	459982	459770	459559	459348	459137	458926
218	458716	458505	458295	458085	457875	457666	457456	457247	457038	456830
219	456621	456412	456204	455996	455788	455581	455373	455166	454959	454752
220	454545	454339	454133	453926	453720	453515	453309	453104	452898	452694
221	452489	452284	452080	451875	451671	451467	451264	451060	450857	450653
222	450450	450248	450045	449842	449640	449438	449236	449034	448833	448632
223	448430	448229	448029	447828	447628	447427	447227	447027	446828	446628
224	446428	446229	446030	445831	445633	445434	445236	445038	444840	444642
225	444444	444247	444050	443853	443656	443459	443262	443066	442870	442674
226	442478	442282	442087	441891	441696	441501	441306	441112	440917	440723
227	440529	440335	440141	439947	439754	439560	439367	439174	438982	438789
228	438596	438404	438212	438020	437828	437637	437445	437254	437063	436872
229	436631	436431	436230	436030	435830	435630	435430	435230	435030	434830
230	434733	434534	434335	434136	433937	433738	433539	433340	433141	432942
231	432900	432703	432506	432309	432112	431915	431719	431522	431326	431129
232	431034	430839	430643	430448	430252	430057	429862	429667	429472	429277
233	429184	428990	428796	428602	428408	428214	428020	427826	427632	427438
234	427350	427158	426965	426772	426579	426386	426193	425999	425806	425613
235	425532	425341	425150	424959	424768	424577	424386	424195	424004	423813
236	423729	423539	423348	423158	422967	422777	422586	422396	422205	422015
237	421941	421753	421565	421377	421189	420999	420811	420623	420434	420246
238	420168	419982	419795	419609	419423	419237	419051	418865	418680	418494
239	418410	418226	418041	417856	417671	417486	417301	417116	416931	416746
240	416667	416483	416299	416115	415931	415747	415562	415378	415194	415009
241	414938	414756	414574	414392	414210	414028	413846	413664	413482	413300
242	413223	413042	412861	412680	412499	412318	412137	411956	411775	411594
243	411523	411343	411163	410983	410803	410623	410443	410263	410083	409903
244	409836	409658	409480	409302	409124	408946	408768	408590	408412	408234
245	408163	407987	407810	407633	407456	407279	407102	406925	406748	406571
246	406504	406329	406154	405979	405804	405629	405454	405279	405104	404929
247	404858	404684	404510	404336	404162	403988	403814	403640	403466	403292
248	403226	403053	402880	402707	402534	402361	402188	402015	401842	401669
249	401606	401435	401264	401093	400922	400751	400580	400409	400238	400067



14. TABELID ARITMEETILISE KESKMISE STANDARDHÄLBE ($s_{\bar{x}}$)

LEIDMISEKS

$s_{\bar{x}} = ?$	$n=3$ $S(x-\bar{x})^2$	$n=4$ $S(x-\bar{x})^2$	$n=5$ $S(x-\bar{x})^2$	$n=6$ $S(x-\bar{x})^2$	$n=7$ $S(x-\bar{x})^2$	$n=8$ $S(x-\bar{x})^2$	$n=9$ $S(x-\bar{x})^2$	$n=10$ $S(x-\bar{x})^2$
1	6	12	20	30	42	56	72	90
2	24	48	80	120	168	224	288	360
3	54	108	180	270	378	504	648	810
4	96	192	320	480	672	896	1152	1440
5	150	300	500	750	1050	1400	1800	2250
6	216	432	720	1080	1512	2016	2592	3240
7	294	584	980	1470	2054	2744	3524	4410
8	384	768	1280	1920	2688	3584	4608	5760
9	486	972	1620	2430	3402	4536	5832	7290
10	600	1200	2000	3000	4200	5000	7200	9000
11	726	1452	2420	3630	5082	6776	8712	10890
12	864	1728	2880	4320	6048	8064	10368	12960
13	1014	2028	3380	5070	7098	9464	12168	15210
14	1176	2352	3920	5880	8232	10976	14112	17640
15	1350	2700	4500	6750	9450	12600	16200	20250
16	1536	3072	5120	7680	10752	14336	18432	23040
17	1734	3468	5780	8670	12138	16184	20808	26010
18	1944	3888	6480	9720	13608	18144	23328	29160
19	2166	4332	7220	10830	15162	20216	25992	32490
20	2400	4800	8000	12000	16800	22400	28800	36000
21	2646	5292	8820	13230	18522	24696	31752	39690
22	2904	5808	9680	14520	20328	27104	34843	43560
23	3174	6348	10580	15870	22218	29624	38088	47610
24	3456	6912	11520	17280	24192	32256	41472	51840
25	3750	7500	12500	18750	26250	35000	45000	56250
26	4056	8112	13520	20280	28392	37856	48672	60840
27	4374	8748	14580	21870	30618	40824	52488	65610
28	4704	9408	15680	23520	32928	43904	56448	70560
29	5046	10092	16820	25230	35322	47096	60552	75690
30	5400	10800	18000	27000	37800	50400	64800	81000
31	5766	11532	19220	28830	40362	53816	69192	86490
32	6144	12288	20480	30720	43008	57344	73728	92160
33	6534	13068	21780	32670	45738	60984	78408	98010
34	6936	13872	23120	34680	48552	64736	83232	104040
35	7350	14700	24500	36750	51450	68600	88200	110250
36	7776	15552	25920	38880	54432	72576	93312	116640
37	8214	16428	27380	41070	57498	76664	98568	123210
38	8664	17328	28880	43320	60648	80864	103968	129960
39	9126	18252	30420	45630	63882	85176	109512	136890
40	9600	19200	32000	48000	67200	89600	115200	144000
41	10086	20172	33620	50430	70602	94136	121032	151290
42	10584	21168	35280	52920	74088	98784	127008	158760
43	11094	22188	36980	55470	77658	103544	133128	166410
44	11616	23232	38720	58080	81312	108416	139392	174240
45	12150	24300	40500	60750	85050	113400	145800	182250
46	12696	25392	43320	63480	88872	118496	152352	190440
47	13254	26508	44180	66270	92778	123704	159048	198810
48	13824	27648	46080	69120	96768	129024	165888	207360
49	14406	28812	48000	72030	100842	134456	172872	216090
50	15000	30000	50000	75000	105000	140000	180000	225000

$\frac{s}{\bar{x}} = ?$	$n=3$ $S(x-\bar{x})^2 =$	$n=4$ $S(x-\bar{x})^2 =$	$n=5$ $S(x-\bar{x})^2 =$	$n=6$ $S(x-\bar{x})^2 =$	$n=7$ $S(x-\bar{x})^2 =$	$n=8$ $S(x-\bar{x})^2 =$	$n=9$ $S(x-\bar{x})^2 =$	$n=10$ $S(x-\bar{x})^2 =$
51	15606	31212	52020	78030	109242	145656	187272	234090
52	16224	32448	54080	81120	113568	151424	194688	243360
53	16854	33708	56180	84270	117978	157304	202248	252810
54	17496	34992	58320	87480	122472	163296	209952	262440
55	18150	36300	60500	90750	127050	169400	217800	272250
56	18816	37632	62720	94080	131712	175616	225792	282240
57	19494	38988	64980	97470	136458	181944	233928	292410
58	20184	40308	67280	100920	141288	188384	242208	302760
59	20886	41772	69620	104430	146202	194936	250632	313290
60	21600	43200	72000	108000	151200	201600	259200	324000
61	22326	44652	74420	111630	156282	208376	267912	334890
62	23064	46128	76880	115320	161448	215264	276768	345960
63	23814	47628	79380	119070	166698	222264	285768	357210
64	24576	49152	81920	122880	172032	229376	294912	368640
65	25350	50700	84500	126750	177450	236600	304200	380250
66	26136	52272	87120	130680	182952	243936	313632	392040
67	26934	53868	89780	134670	188538	251384	323208	404010
68	27744	55488	92480	138720	194208	258944	332928	416160
69	28566	57132	95220	142830	199962	266616	342792	428490
70	29400	58400	98000	147000	205400	274400	352400	441000
71	30246	60492	100820	151230	211722	282296	362952	453690
72	31104	62208	103680	155520	217728	290304	373248	466560
73	31974	63948	106580	159870	223818	298424	383688	479610
74	32856	65712	109520	164280	229992	306656	394272	492840
75	33750	67500	112500	168750	236250	315000	405000	506250
76	34656	69312	115520	173280	242592	323456	415872	519840
77	35574	71148	118580	177870	249018	332024	426888	533610
78	36504	73008	121580	182520	255528	340704	438048	547560
79	37446	74892	124820	187230	262122	349496	449352	561690
80	38400	76800	128000	192000	268800	358400	460800	576000
81	39366	78732	131220	196830	275562	367416	472392	590490
82	40344	80688	134480	201720	282408	376544	484128	605160
83	41334	82668	137780	206670	289338	385784	496008	620010
84	42336	84672	141120	211680	296352	395136	508032	635040
85	43350	86700	144500	216750	303450	404600	520200	650250
86	44376	88752	147920	221880	310632	414176	532512	665640
87	45414	90828	151380	227070	317898	423864	544968	681210
88	46464	92928	154880	232320	325248	433664	557568	696960
89	47526	95052	158420	237630	332682	443576	570312	712890
90	48600	97200	162000	243000	340200	453600	583200	729000
91	49686	99372	165620	248430	347802	463736	596232	745290
92	50784	101568	169280	253920	355488	473984	609408	761760
93	51894	103788	172980	259420	363258	484344	622728	778410
94	53016	106032	176720	265080	371112	494816	636192	795240
95	54150	108300	180500	270750	379050	505400	649800	812250
96	55296	110592	184320	276480	387072	516096	663552	829440
97	56454	112908	188180	282270	395178	526904	677448	846810
98	57624	115248	192080	288120	403368	537824	691488	864360
99	58806	117612	196020	294030	411642	548856	705672	882090
100	60000	120000	200000	300000	420000	560000	720000	900000

$\frac{s^2}{x} = ?$	$n=3$ $S(x-\bar{x})^2 =$	$n=4$ $S(x-\bar{x})^2 =$	$n=5$ $S(x-\bar{x})^2 =$	$n=6$ $S(x-\bar{x})^2 =$	$n=7$ $S(x-\bar{x})^2 =$	$n=8$ $S(x-\bar{x})^2 =$	$n=9$ $S(x-\bar{x})^2 =$	$n=10$ $S(x-\bar{x})^2 =$
101	61206	122412	204020	306030	428442	571256	734472	918090
102	62424	124848	208080	312120	436968	582624	749088	936360
103	63654	127308	212180	318270	445578	594104	763848	954810
104	64896	129792	216320	324480	454272	605696	778752	973440
105	66150	132300	220500	330750	463050	617400	793800	992250
106	67416	134832	224720	337080	471912	629216	808992	1011120
107	68494	137388	228980	343470	480858	641144	824328	1030200
108	69984	139968	233380	349920	489888	653184	839808	1050200
109	71286	142572	237620	356430	499002	665336	855432	1069200
110	72600	145200	242000	363000	508200	677600	871200	1089200
111	73926	147852	246420	369630	517482	689976	887112	1109200
112	75264	150528	250880	376320	526848	702464	903168	1229200
113	76614	153228	255380	383070	536298	715064	919368	1149200
114	77976	155952	259920	389880	545832	727776	935712	1170200
115	79350	158700	264500	396750	555450	740600	952200	1190200
116	80736	161472	269120	403680	565152	753536	968832	1211200
117	82134	164268	273780	410670	574938	766584	985608	1232200
118	83544	167088	278480	417720	584808	779744	1002528	1253200
119	84966	169932	283220	424830	594762	793016	1020200	1274200
120	86400	172800	288000	432000	604800	806400	1037200	1296200
121	87846	175692	292820	439230	614922	819893	1054200	1318200
122	89304	178608	297680	446520	625128	833504	1072200	1340200
123	90774	181548	302580	453870	635418	847224	1089200	1362200
124	92256	184512	307520	461280	645792	861056	1107200	1384200
125	93750	187500	312500	468750	656250	875000	1125200	1406200
126	95256	190512	317520	476280	666792	889056	1143200	1429200
127	96774	193548	322580	483870	677418	903224	1161200	1452200
128	98304	195608	327680	491520	688128	917504	1180200	1475200
129	99846	199692	332820	499230	698922	931893	1198200	1498200
130	101400	202800	338000	507000	709800	946400	1217200	1521200
131	102966	205932	343220	514830	720762	961016	1236200	1544200
132	104544	209088	348480	522720	731808	975744	1255200	1568200
133	106134	212268	353780	530670	742938	990584	1274200	1592200
134	107736	215472	359120	538680	754152	1005536	1293200	1616200
135	109350	218700	364500	546750	765450	1021200	1312200	1640200
136	110976	221952	369920	554880	776832	1036200	1332200	1665200
137	112614	225228	375380	563070	788298	1051200	1351200	1689200
138	114264	228528	380880	571320	799848	1066200	1371200	1714200
139	115926	231852	386420	579630	811482	1082200	1391200	1739200
140	117600	235200	392000	588000	823200	1098200	1411200	1764200
141	119286	238572	397620	596430	835002	1113200	1431200	1789200
142	120984	241938	403280	604920	846888	1129200	1452200	1815200
143	122694	245388	408980	613470	858858	1145200	1472200	1840200
144	124416	248832	414720	622080	870912	1161200	1493200	1866200
145	126150	252300	420500	630750	883050	1177200	1514200	1892200
146	127896	255792	426320	639480	895272	1194200	1535200	1918200
147	129654	259308	432180	648270	907578	1210200	1556200	1945200
148	131424	262848	438080	657120	919968	1227200	1577200	1971200
149	133206	266412	444020	666030	932442	1243200	1598200	1998200
150	135000	270000	450000	675000	945000	1260200	1620200	2025200

$\frac{S}{x}=?$	$n=3$ $S(x-\bar{x})^2$	$n=4$ $S(x-\bar{x})^2$	$n=5$ $S(x-\bar{x})^2$	$n=6$ $S(x-\bar{x})^2$	$n=7$ $S(x-\bar{x})^2$	$n=8$ $S(x-\bar{x})^2$	$n=9$ $S(x-\bar{x})^2$	$n=10$ $S(x-\bar{x})^2$
151	136806	273612	456020	684030	957642	1277T	1642T	2052T
152	138624	277248	462080	693120	970368	1294T	1663T	2079T
153	140454	280908	468180	702270	983178	1311T	1685T	2107T
154	142296	284592	474320	711480	996072	1328T	1708T	2134T
155	144150	288300	480500	720750	1009T	1345T	1730T	2162T
156	146016	292032	486720	730080	1022T	1363T	1752T	2190T
157	147894	295788	492980	739470	1035T	1380T	1775T	2218T
158	149784	299568	499280	748920	1048T	1398T	1797T	2247T
159	151686	303372	505620	758430	1062T	1416T	1820T	2275T
160	153600	307200	512000	768000	1075T	1434T	1843T	2304T
161	155526	311052	518420	777630	1089T	1452T	1866T	2333T
162	157460	314928	524880	787320	1102T	1470T	1890T	2362T
163	159414	318828	531380	797070	1115T	1488T	1913T	2391T
164	161376	322752	537920	806880	1130T	1506T	1937T	2421T
165	163350	326700	544500	816750	1143T	1526T	1960T	2450T
166	165336	330672	551120	826680	1157T	1543T	1984T	2480T
167	167334	334668	557780	836670	1171T	1562T	2008T	2510T
168	169344	338688	564480	846720	1185T	1581T	2032T	2540T
169	171366	342732	571220	856830	1200T	1599T	2056T	2570T
170	173400	346800	578000	867000	1214T	1618T	2081T	2601T
171	175446	350892	584820	877230	1228T	1637T	2105T	2632T
172	177504	355008	591680	887520	1243T	1657T	2130T	2663T
173	179574	359148	598580	897870	1257T	1676T	2155T	2694T
174	181656	363312	605520	908280	1272T	1695T	2180T	2725T
175	183750	367500	612500	918750	1286T	1715T	2205T	2756T
176	185856	371712	619520	929280	1301T	1735T	2230T	2788T
177	187974	375948	626580	939870	1316T	1754T	2256T	2820T
178	190104	380208	633680	950520	1331T	1774T	2281T	2852T
179	192246	384492	640820	961230	1346T	1794T	2307T	2884T
180	194400	388800	648000	972000	1361T	1814T	2333T	2916T
181	196566	393132	655220	982830	1376T	1835T	2359T	2948T
182	198744	397488	662480	993720	1391T	1855T	2385T	2981T
183	200934	401868	669780	1005T	1407T	1875T	2411T	3014T
184	203136	406272	677120	1016T	1422T	1896T	2438T	3047T
185	205350	410700	684500	1027T	1437T	1917T	2464T	3080T
186	207576	415152	691920	1038T	1453T	1937T	2491T	3114T
187	209814	419628	699380	1049T	1469T	1958T	2518T	3147T
188	212064	424128	706880	1060T	1484T	1979T	2545T	3181T
189	214326	428652	714420	1072T	1500T	2004T	2572T	3215T
190	216600	433200	722000	1083T	1516T	2022T	2599T	3249T
191	218886	437772	729620	1094T	1532T	2043T	2627T	3283T
192	221184	442368	737280	1106T	1548T	2064T	2654T	3318T
193	223494	446988	744980	1117T	1564T	2086T	2682T	3352T
194	225816	451632	752720	1129T	1581T	2108T	2710T	3387T
195	228150	456300	760500	1141T	1597T	2129T	2738T	3422T
196	230496	460992	768320	1152T	1613T	2151T	2765T	3457T
197	232856	465708	776180	1164T	1630T	2173T	2794T	3493T
198	235224	470448	784080	1176T	1647T	2195T	2823T	3528T
199	237606	475212	792020	1188T	1663T	2218T	2851T	3564T
200	240000	480000	800000	1200T	1680T	2240T	2880T	2600T

$s_{\bar{x}} = ?$	$n=3$ $S(x-\bar{x})^2$	$n=4$ $S(x-\bar{x})^2$	$n=5$ $S(x-\bar{x})^2$	$n=6$ $S(x-\bar{x})^2$	$n=7$ $S(x-\bar{x})^2$	$n=8$ $S(x-\bar{x})^2$	$n=9$ $S(x-\bar{x})^2$	$n=10$ $S(x-\bar{x})^2$
201	242 406	484 812	808 020	1 212 T	1 697 T	2 262 T	2 909 T	3 636 T
202	244 826	489 648	816 080	1 224 T	1 714 T	2 285 T	2 938 T	3 672 T
203	247 254	494 508	824 180	1 236 T	1 731 T	2 308 T	2 967 T	3 709 T
204	249 696	499 392	832 320	1 248 T	1 748 T	2 330 T	2 996 T	3 745 T
205	252 150	504 300	840 500	1 261 T	1 765 T	2 353 T	3 026 T	3 782 T
206	254 616	509 232	848 720	1 273 T	1 782 T	2 376 T	3 055 T	3 819 T
207	257 094	514 188	856 930	1 285 T	1 800 T	2 400 T	3 085 T	3 856 T
208	259 584	519 168	865 280	1 298 T	1 817 T	2 423 T	3 115 T	3 894 T
209	262 086	524 172	873 620	1 310 T	1 835 T	2 446 T	3 145 T	3 931 T
210	264 600	529 200	882 000	1 323 T	1 852 T	2 470 T	3 175 T	3 969 T
211	267 126	534 252	890 420	1 336 T	1 870 T	2 493 T	3 206 T	4 007 T
212	269 664	539 328	898 880	1 348 T	1 888 T	2 517 T	3 236 T	4 045 T
213	272 214	544 428	907 380	1 361 T	1 905 T	2 541 T	3 267 T	4 083 T
214	274 776	549 552	915 920	1 374 T	1 923 T	2 564 T	3 297 T	4 122 T
215	277 350	554 700	924 500	1 387 T	1 941 T	2 589 T	3 328 T	4 160 T
216	279 936	559 872	933 120	1 400 T	1 960 T	2 613 T	3 359 T	4 199 T
217	282 534	565 068	941 780	1 413 T	1 978 T	2 637 T	3 390 T	4 238 T
218	285 144	570 288	950 480	1 426 T	1 996 T	2 661 T	3 422 T	4 277 T
219	287 766	575 532	959 220	1 439 T	2 014 T	2 686 T	3 453 T	4 316 T
220	290 400	580 800	968 000	1 452 T	2 032 T	2 710 T	3 485 T	4 356 T
221	293 046	586 092	976 820	1 465 T	2 051 T	2 735 T	3 517 T	4 396 T
222	295 704	591 408	985 680	1 479 T	2 070 T	2 760 T	3 548 T	4 436 T
223	298 374	596 748	994 580	1 492 T	2 089 T	2 785 T	3 580 T	4 476 T
224	301 156	602 112	1 003 520	1 505 T	2 107 T	2 810 T	3 613 T	4 516 T
225	303 750	607 500	1 012 500	1 519 T	2 126 T	2 835 T	3 645 T	4 556 T
226	306 456	612 912	1 022 520	1 532 T	2 145 T	2 860 T	3 677 T	4 597 T
227	309 174	618 348	1 031 500	1 546 T	2 164 T	2 886 T	3 710 T	4 638 T
228	311 904	623 808	1 040 500	1 560 T	2 183 T	2 911 T	3 743 T	4 679 T
229	314 646	629 292	1 049 520	1 573 T	2 203 T	2 937 T	3 776 T	4 720 T
230	317 400	634 800	1 058 000	1 587 T	2 222 T	2 962 T	3 809 T	4 761 T
231	320 166	640 312	1 067 500	1 601 T	2 241 T	2 983 T	3 842 T	4 802 T
232	322 944	645 888	1 076 500	1 615 T	2 261 T	3 014 T	3 875 T	4 844 T
233	325 734	651 468	1 086 500	1 629 T	2 280 T	3 040 T	3 909 T	4 886 T
234	328 536	657 072	1 095 500	1 643 T	2 300 T	3 066 T	3 942 T	4 928 T
235	331 350	662 700	1 104 500	1 657 T	2 319 T	3 093 T	3 976 T	4 970 T
236	334 176	668 352	1 114 500	1 671 T	2 339 T	3 119 T	4 010 T	5 013 T
237	337 014	674 028	1 123 500	1 685 T	2 359 T	3 145 T	4 044 T	5 055 T
238	339 864	679 728	1 133 500	1 699 T	2 379 T	3 172 T	4 078 T	5 098 T
239	342 726	685 452	1 142 500	1 714 T	2 399 T	3 199 T	4 113 T	5 141 T
240	345 600	691 200	1 152 000	1 728 T	2 419 T	3 226 T	4 147 T	5 184 T
241	348 486	696 970	1 162 500	1 742 T	2 439 T	3 255 T	4 182 T	5 227 T
242	351 384	702 768	1 171 500	1 757 T	2 460 T	3 280 T	4 217 T	5 271 T
243	354 294	708 588	1 181 500	1 771 T	2 480 T	3 307 T	4 252 T	5 314 T
244	357 216	714 432	1 191 500	1 786 T	2 501 T	3 334 T	4 287 T	5 358 T
245	360 150	720 300	1 200 500	1 801 T	2 521 T	3 361 T	4 322 T	5 402 T
246	363 096	726 192	1 210 500	1 815 T	2 542 T	3 389 T	4 357 T	5 446 T
247	366 054	732 108	1 220 500	1 830 T	2 562 T	3 417 T	4 392 T	5 491 T
248	369 024	738 048	1 230 500	1 845 T	2 583 T	3 444 T	4 428 T	5 535 T
249	372 006	744 012	1 240 500	1 860 T	2 604 T	3 472 T	4 464 T	5 580 T
250	375 000	750 000	1 250 000	1 875 T	2 625 T	3 500 T	4 500 T	5 620 T

$\frac{s-\bar{x}}{\bar{x}} = ?$	$n=3$ $S(x-\bar{x})^2 =$	$n=4$ $S(x-\bar{x})^2 =$	$n=5$ $S(x-\bar{x})^2 =$	$n=6$ $S(x-\bar{x})^2 =$	$n=7$ $S(x-\bar{x})^2 =$	$n=8$ $S(x-\bar{x})^2 =$	$n=9$ $S(x-\bar{x})^2 =$	$n=10$ $S(x-\bar{x})^2 =$
251	378006	756012	1260T	1890T	2646T	3528T	4536T	5670T
252	381024	762048	1270T	1905T	2667T	3556T	4572T	5715T
253	384054	768108	1280T	1920T	2688T	3585T	4609T	5761T
254	387096	774192	1290T	1935T	2710T	3613T	4645T	5806T
255	390150	780300	1300T	1951T	2731T	3641T	4682T	5852T
256	393216	786432	1311T	1966T	2753T	3670T	4719T	5898T
257	396294	792683	1321T	1981T	2774T	3699T	4756T	5944T
259	399384	798763	1331T	1997T	2796T	3728T	4793T	5991T
259	402486	804972	1342T	2012T	2817T	3757T	4830T	6037T
260	405600	811200	1352T	2028T	2839T	3786T	4867T	6084T
261	408726	817452	1362T	2044T	2861T	3815T	4905T	6131T
262	411864	823728	1373T	2059T	2883T	3844T	4942T	6178T
263	415014	830028	1385T	2075T	2905T	3873T	4980T	6225T
264	418176	836352	1394T	2091T	2927T	3903T	5018T	6273T
265	421350	842700	1404T	2107T	2949T	3933T	5056T	6320T
266	424536	849072	1415T	2123T	2972T	3962T	5094T	6368T
267	427734	855468	1426T	2139T	2994T	3992T	5133T	6416T
268	430944	861888	1436T	2155T	3017T	4022T	5171T	6464T
269	434166	868332	1447T	2171T	3039T	4052T	5210T	6512T
270	437400	874800	1458T	2187T	3062T	4082T	5249T	6561T
271	440646	881292	1469T	2203T	3085T	4113T	5288T	6610T
272	443904	887808	1480T	2220T	3107T	4143T	5327T	6659T
273	447174	894348	1491T	2236T	3130T	4174T	5366T	6708T
274	450456	900912	1502T	2252T	3153T	4204T	5405T	6757T
275	453750	907500	1512T	2269T	3176T	4235T	5445T	6806T
276	457056	914112	1524T	2285T	3199T	4266T	5485T	6856T
277	460374	920748	1535T	2302T	3223T	4297T	5524T	6906T
278	463704	927408	1546T	2319T	3246T	4328T	5564T	6956T
279	467046	934092	1557T	2335T	3269T	4359T	5605T	7006T
280	470400	940800	1568T	2352T	3293T	4390T	5645T	7056T
281	473766	947532	1579T	2369T	3316T	4422T	5685T	7106T
282	477144	954288	1590T	2386T	3340T	4453T	5726T	7157T
283	480534	961068	1602T	2403T	3364T	4485T	5766T	7208T
284	483936	967872	1613T	2420T	3388T	4517T	5807T	7259T
285	487350	974700	1624T	2437T	3411T	4549T	5848T	7310T
286	490776	981552	1636T	2454T	3435T	4581T	5889T	7362T
287	494214	988428	1647T	2471T	3459T	4613T	5931T	7413T
288	497664	995328	1659T	2488T	3484T	4645T	5972T	7465T
289	501126	1002252	1670T	2506T	3508T	4677T	6014T	7517T
290	504600	1009T	1682T	2523T	3532T	4710T	6055T	7569T
291	508086	1016T	1694T	2540T	3557T	4742T	6097T	7621T
292	511584	1023T	1705T	2558T	3581T	4775T	6139T	7674T
293	515094	1030T	1717T	2575T	3606T	4808T	6181T	7726T
294	518616	1037T	1729T	2593T	3630T	4840T	6223T	7779T
295	522150	1044T	1740T	2611T	3655T	4873T	6266T	7832T
296	525696	1051T	1752T	2628T	3680T	4906T	6308T	7885T
297	529254	1059T	1764T	2646T	3708T	4940T	6351T	7939T
298	532824	1066T	1776T	2664T	3730T	4973T	6394T	7992T
299	536406	1073T	1788T	2682T	3755T	5006T	6437T	8046T
300	540000	1080T	1800T	2700T	3780T	5040T	6480T	8100T

$\frac{s-\bar{x}}{\bar{x}} = ?$	$n=3$ $S(x-\bar{x})^2$	$n=4$ $S(x-\bar{x})^2$	$n=5$ $S(x-\bar{x})^2$	$n=6$ $S(x-\bar{x})^2$	$n=7$ $S(x-\bar{x})^2$	$n=8$ $S(x-\bar{x})^2$	$n=9$ $S(x-\bar{x})^2$	$n=10$ $S(x-\bar{x})^2$
301	543606	1087T	1812T	2718T	3805T	5074T	6523T	8154T
302	547224	1094T	1824T	2736T	3831T	5107T	6567T	8208T
303	550854	1102T	1836T	2754T	3856T	5141T	6610T	8263T
304	554496	1109T	1848T	2772T	3881T	5175T	6654T	8317T
305	558150	1116T	1860T	2791T	3907T	5209T	6698T	8372T
306	561816	1124T	1873T	2809T	3933T	5244T	6742T	8427T
307	565494	1131T	1885T	2827T	3958T	5278T	6786T	8482T
308	569184	1138T	1897T	2846T	3984T	5312T	6830T	8538T
309	572886	1146T	1910T	2864T	4010T	5347T	6875T	8593T
310	576600	1153T	1922T	2883T	4036T	5382T	6919T	8649T
311	580326	1161T	1934T	2902T	4062T	5416T	6964T	8705T
312	584064	1168T	1947T	2920T	4088T	5451T	7009T	8761T
313	587814	1176T	1959T	2939T	4115T	5486T	7054T	8817T
314	591576	1183T	1972T	2958T	4141T	5521T	7099T	8874T
315	595350	1191T	1984T	2977T	4167T	5557T	7144T	8930T
316	599136	1198T	1997T	2996T	4194T	5592T	7190T	8987T
317	602934	1206T	2010T	3015T	4221T	5627T	7235T	9044T
318	606794	1213T	2022T	3034T	4247T	5663T	7281T	9101T
319	610566	1221T	2035T	3053T	4274T	5697T	7327T	9158T
320	614400	1229T	2048T	3072T	4301T	5734T	7373T	9216T
321	618246	1236T	2061T	3091T	4328T	5770T	7419T	9274T
322	622104	1244T	2074T	3111T	4355T	5806T	7465T	9331T
323	625974	1252T	2087T	3130T	4382T	5842T	7512T	9390T
324	629856	1260T	2100T	3149T	4409T	5879T	7558T	9448T
325	633750	1264T	2112T	3169T	4436T	5915T	7605T	9506T
326	637656	1275T	2126T	3188T	4464T	5951T	7652T	9565T
327	641574	1283T	2139T	3208T	4491T	5988T	7699T	9624T
328	645504	1291T	2152T	3227T	4519T	6025T	7746T	9683T
329	649446	1299T	2165T	3247T	4546T	6061T	7793T	9742T
330	653400	1307T	2178T	3267T	4574T	6098T	7841T	9801T
331	657366	1315T	2191T	3287T	4602T	6135T	7888T	9860T
332	661344	1323T	2204T	3307T	4629T	6173T	7936T	9920T
333	665334	1331T	2218T	3327T	4657T	6210T	7984T	9980T
334	669336	1339T	2231T	3347T	4685T	6247T	8032T	10040T
335	673350	1347T	2244T	3367T	4713T	6285T	8080T	10100T
336	677376	1355T	2258T	3387T	4742T	6322T	8129T	10161T
337	681414	1363T	2271T	3407T	4770T	6360T	8177T	10221T
338	685464	1371T	2285T	3427T	4798T	6398T	8226T	10281T
339	689526	1379T	2298T	3448T	4827T	6436T	8274T	10343T
340	693600	1387T	2312T	3468T	4855T	6474T	8323T	10404T
341	697686	1395T	2326T	3488T	4884T	6512T	8372T	10465T
342	701784	1404T	2339T	3509T	4912T	6550T	8421T	10526T
343	705894	1412T	2353T	3529T	4941T	6588T	8471T	10588T
344	710016	1420T	2367T	3550T	4970T	6626T	8520T	10650T
345	714150	1428T	2380T	3571T	5000T	6665T	8570T	10712T
346	718296	1437T	2394T	3592T	5028T	6704T	8620T	10774T
347	722454	1445T	2408T	3612T	5057T	6743T	8669T	10836T
348	726624	1453T	2422T	3633T	5086T	6782T	8719T	10899T
349	730806	1462T	2436T	3654T	5116T	6821T	8770T	10962T
350	735000	1470T	2450T	3675T	5145T	6860T	8820T	11025T

$\frac{S}{\bar{x}} = ?$	$n=3$ $S(x-\bar{x})^2 =$	$n=4$ $S(x-\bar{x})^2 =$	$n=5$ $S(x-\bar{x})^2 =$	$n=6$ $S(x-\bar{x})^2 =$	$n=7$ $S(x-\bar{x})^2 =$	$n=8$ $S(x-\bar{x})^2 =$	$n=9$ $S(x-\bar{x})^2 =$	$n=10$ $S(x-\bar{x})^2 =$
351	739206	1478T	2464T	3696T	5174T	6899T	8870T	11088T
352	743424	1487T	2478T	3717T	5204T	6939T	8921T	11151T
353	747654	1495T	2492T	3738T	5234T	6978T	8972T	11215T
354	751896	1504T	2506T	3759T	5263T	7018T	9023T	11278T
355	756150	1512T	2520T	3780T	5293T	7057T	9074T	11342T
356	760416	1521T	2534T	3802T	5323T	7097T	9125T	11406T
357	764694	1529T	2549T	3823T	5353T	7137T	9176T	11470T
358	768984	1538T	2563T	3845T	5383T	7177T	9228T	11534T
359	773286	1547T	2578T	3866T	5413T	7217T	9279T	11599T
360	777600	1555T	2592T	3888T	5443T	7258T	9331T	11664T
361	781926	1564T	2606T	3910T	5473T	7298T	9383T	11729T
362	786264	1573T	2621T	3931T	5504T	7338T	9435T	11794T
363	790614	1581T	2635T	3953T	5534T	7379T	9487T	11859T
364	794976	1590T	2650T	3975T	5565T	7420T	9540T	11924T
365	799350	1599T	2664T	3997T	5595T	7461T	9592T	11990T
366	803736	1607T	2679T	4019T	5626T	7502T	9645T	12056T
367	808134	1616T	2694T	4041T	5657T	7543T	9698T	12122T
368	812544	1625T	2708T	4063T	5688T	7584T	9751T	12188T
369	816966	1634T	2723T	4085T	5719T	7625T	9804T	12254T
370	821400	1643T	2738T	4107T	5750T	7666T	9857T	12321T
371	825846	1652T	2753T	4129T	5781T	7708T	9910T	12388T
372	830304	1661T	2768T	4152T	5812T	7750T	9964T	12455T
373	834774	1670T	2783T	4174T	5843T	7791T	10017T	12522T
374	839256	1679T	2798T	4196T	5875T	7833T	10071T	12589T
375	843750	1687T	2812T	4219T	5906T	7875T	10125T	12656T
376	848256	1697T	2828T	4241T	5938T	7917T	10179T	12724T
377	852774	1705T	2843T	4264T	5969T	7959T	10233T	12792T
378	857304	1715T	2858T	4280T	6001T	8002T	10288T	12859T
379	861846	1724T	2873T	4309T	6033T	8044T	10342T	12928T
380	866400	1733T	2888T	4332T	6065T	8085T	10397T	12996T
381	870966	1742T	2903T	4355T	6097T	8129T	10452T	13064T
382	875544	1751T	2918T	4378T	6129T	8172T	10507T	13133T
383	880134	1760T	2934T	4401T	6161T	8215T	10562T	13202T
384	884736	1769T	2949T	4424T	6193T	8258T	10617T	13271T
385	889350	1779T	2964T	4447T	6225T	8301T	10672T	13340T
386	893976	1788T	2980T	4470T	6258T	8344T	10728T	13410T
387	898614	1797T	2995T	4493T	6290T	8387T	10783T	13479T
388	903264	1807T	3011T	4516T	6323T	8430T	10839T	13548T
389	907926	1816T	3026T	4540T	6355T	8474T	10895T	13619T
390	912600	1825T	3042T	4563T	6388T	8518T	10951T	13689T
391	917286	1835T	3058T	4586T	6421T	8561T	11007T	13759T
392	921984	1844T	3073T	4610T	6454T	8605T	11064T	13830T
393	926694	1853T	3089T	4633T	6487T	8649T	11120T	13900T
394	931416	1863T	3105T	4657T	6520T	8693T	11177T	13971T
395	936150	1872T	3120T	4681T	6553T	8737T	11235T	14042T
396	940896	1881T	3136T	4704T	6586T	8782T	11291T	14113T
397	945654	1891T	3152T	4728T	6620T	8826T	11348T	14185T
398	950424	1901T	3168T	4752T	6653T	8871T	11405T	14256T
399	955204	1910T	3184T	4776T	6686T	8915T	11462T	14328T
400	960000	1920T	3200T	4800T	6720T	8960T	11520T	14400T

$S_{x-\bar{x}}^2$?	$n=3$ $S(x-\bar{x})^2$	$n=4$ $S(x-\bar{x})^2$	$n=5$ $S(x-\bar{x})^2$	$n=6$ $S(x-\bar{x})^2$	$n=7$ $S(x-\bar{x})^2$	$n=8$ $S(x-\bar{x})^2$	$n=9$ $S(x-\bar{x})^2$	$n=10$ $S(x-\bar{x})^2$
401	964806	1930T	3216T	4824T	6754T	9005T	11578T	14472T
402	969624	1939T	3232T	4848T	6787T	9050T	11635T	14544T
403	974454	1949T	3248T	4872T	6821T	9094T	11693T	14617T
404	979296	1959T	3264T	4896T	6855T	9140T	11751T	14689T
405	984150	1968T	3280T	4921T	6899T	9185T	11809T	14762T
406	989016	1978T	3297T	4945T	6923T	9231T	11868T	14835T
407	993894	1988T	3313T	4969T	6957T	9276T	11927T	14908T
408	998784	1998T	3329T	4994T	6991T	9322T	11985T	14982T
409	1003686	2007T	3345T	5018T	7026T	9368T	12044T	15055T
410	1008T	2017T	3362T	5043T	7060T	9413T	12103T	15129T
411	1013T	2027T	3378T	5068T	7095T	9460T	12162T	15203T
412	1018T	2037T	3395T	5092T	7129T	9506T	12221T	15277T
413	1023T	2047T	3411T	5117T	7164T	9552T	12281T	15351T
414	1028T	2057T	3428T	5142T	7199T	9598T	12341T	15426T
415	1033T	2067T	3444T	5167T	7233T	9645T	12400T	15500T
416	1038T	2077T	3461T	5192T	7268T	9691T	12460T	15575T
417	1043T	2087T	3478T	5217T	7303T	9738T	12520T	15650T
418	1048T	2097T	3494T	5242T	7338T	9785T	12580T	15725T
419	1053T	2106T	3511T	5267T	7374T	9831T	12640T	15800T
420	1058T	2117T	3528T	5292T	7409T	9878T	12701T	15876T
421	1063T	2127T	3545T	5317T	7444T	9925T	12761T	15952T
422	1069T	2137T	3562T	5343T	7480T	9972T	12822T	16028T
423	1074T	2147T	3579T	5368T	7515T	10020T	12883T	16104T
424	1079T	2157T	3596T	5393T	7551T	10067T	12944T	16180T
425	1084T	2167T	3612T	5419T	7586T	10115T	13005T	16256T
426	1089T	2178T	3630T	5444T	7622T	10163T	13066T	16333T
427	1094T	2188T	3647T	5470T	7658T	10210T	13128T	16410T
428	1099T	2198T	3664T	5496T	7694T	10258T	13189T	16487T
429	1104T	2208T	3681T	5521T	7730T	10306T	13251T	16564T
430	1109T	2219T	3698T	5547T	7766T	10354T	13313T	16641T
431	1115T	2229T	3715T	5573T	7802T	10403T	13375T	16718T
432	1120T	2239T	3732T	5599T	7838T	10451T	13437T	16796T
433	1125T	2250T	3750T	5625T	7875T	10499T	13499T	16874T
434	1130T	2260T	3767T	5651T	7911T	10548T	13562T	16952T
435	1135T	2271T	3784T	5677T	7947T	10597T	13624T	17030T
486	1141T	2281T	3801T	5703T	7984T	10645T	13687T	17109T
437	1146T	2292T	3819T	5729T	8021T	10694T	13750T	17187T
438	1151T	2302T	3837T	5755T	8057T	10743T	13813T	17266T
439	1156T	2313T	3854T	5782T	8094T	10792T	13876T	17345T
440	1162T	2323T	3872T	5808T	8131T	10842T	13939T	17424T
441	1167T	2334T	3890T	5834T	8168T	10891T	14003T	17503T
442	1172T	2344T	3907T	5861T	8205T	10940T	14066T	17583T
443	1177T	2355T	3925T	5887T	8242T	10990T	14130T	17662T
444	1183T	2366T	3943T	5914T	8280T	11040T	14194T	17742T
445	1188T	2376T	3960T	5941T	8317T	11089T	14258T	17822T
446	1193T	2387T	3978T	5967T	8354T	11139T	14322T	17902T
447	1199T	2398T	3996T	5994T	8392T	11189T	14386T	17983T
448	1204T	2408T	4014T	6021T	8430T	11239T	14451T	18063T
449	1210T	2419T	4032T	6048T	8467T	11290T	14515T	18144T
450	1215T	2430T	4050T	6075T	8505T	11340T	14580T	18225T

$S_{\bar{x}} = ?$	$n=3$ $S(x-\bar{x})^2 =$	$n=4$ $S(x-\bar{x})^2 =$	$n=5$ $S(x-\bar{x})^2 =$	$n=6$ $S(x-\bar{x})^2 =$	$n=7$ $S(x-\bar{x})^2 =$	$n=8$ $S(x-\bar{x})^2 =$	$n=9$ $S(x-\bar{x})^2 =$	$n=10$ $S(x-\bar{x})^2 =$
451	1220T	2441T	4068T	6102T	8543T	11390T	14645T	18306T
452	1226T	2452T	4086T	6129T	8581T	11441T	14710T	18387T
453	1231T	2463T	4104T	6156T	8619T	11492T	14775T	18469T
454	1237T	2473T	4122T	6183T	8657T	11542T	14840T	18550T
455	1242T	2484T	4140T	6211T	8695T	11593T	14906T	18632T
456	1248T	2495T	4159T	6238T	8733T	11644T	14971T	18714T
457	1253T	2506T	4177T	6265T	8772T	11696T	15037T	18796T
458	1259T	2517T	4195T	6293T	8810T	11747T	15103T	18879T
459	1264T	2528T	4214T	6320T	8849T	11798T	15169T	18961T
460	1270T	2539T	4232T	6348T	8887T	11850T	15235T	19044T
461	1275T	2550T	4250T	6376T	8926T	11901T	15302T	19127T
462	1281T	2561T	4269T	6403T	8965T	11953T	15368T	19210T
463	1286T	2572T	4287T	6431T	9003T	12005T	15435T	19293T
464	1292T	2584T	4306T	6459T	9042T	12057T	15501T	19377T
465	1297T	2595T	4324T	6487T	9081T	12109T	15568T	19460T
466	1303T	2606T	4343T	6515T	9121T	12161T	15635T	19544T
467	1309T	2617T	4362T	6543T	9160T	12213T	15702T	19628T
468	1314T	2628T	4380T	6571T	9199T	12265T	15770T	19712T
469	1319T	2640T	4399T	6599T	9238T	12318T	15837T	19796T
470	1325T	2651T	4418T	6627T	9278T	12370T	15905T	19881T
471	1331T	2662T	4437T	6655T	9317T	12423T	15973T	19966T
472	1337T	2673T	4456T	6684T	9357T	12476T	16040T	20051T
473	1342T	2685T	4475T	6712T	9397T	12529T	16108T	20136T
474	1348T	2696T	4494T	6740T	9436T	12582T	16177T	20221T
475	1354T	2707T	4512T	6769T	9476T	12635T	16245T	20306T
476	1359T	2719T	4532T	6797T	9516T	12688T	16313T	20391T
477	1365T	2730T	4551T	6826T	9556T	12742T	16382T	20478T
478	1371T	2742T	4570T	6855T	9596T	12795T	16451T	20564T
479	1377T	2753T	4589T	6883T	9637T	12849T	16520T	20650T
480	1382T	2765T	4608T	6912T	9677T	12902T	16589T	20736T
481	1388T	2776T	4627T	6941T	9717T	12956T	16658T	20822T
482	1394T	2788T	4646T	6970T	9758T	13010T	16727T	20909T
483	1400T	2799T	4666T	6999T	9798T	13064T	16797T	20996T
484	1406T	2811T	4685T	7028T	9839T	13118T	16866T	21083T
485	1411T	2823T	4704T	7057T	9879T	13173T	16936T	21170T
486	1417T	2834T	4724T	7086T	9920T	13227T	17006T	21258T
487	1423T	2846T	4743T	7115T	9961T	13281T	17076T	21345T
488	1429T	2858T	4763T	7144T	10002T	13336T	17146T	21433T
489	1435T	2869T	4782T	7174T	10043T	13391T	17217T	21521T
490	1441T	2881T	4801T	7203T	10084T	13446T	17287T	21609T
491	1446T	2893T	4822T	7232T	10125T	13501T	17358T	21697T
492	1452T	2905T	4841T	7262T	10167T	13556T	17429T	21786T
493	1458T	2917T	4861T	7291T	10208T	13611T	17500T	21874T
494	1464T	2928T	4881T	7321T	10249T	13666T	17571T	21963T
495	1470T	2940T	4900T	7351T	10291T	13721T	17642T	22052T
496	1476T	2952T	4920T	7380T	10333T	13777T	17713T	22141T
497	1482T	2964T	4940T	7410T	10374T	13833T	17785T	22231T
498	1488T	2976T	4960T	7440T	10416T	13888T	17856T	22321T
499	1494T	2988T	4980T	7470T	10458T	13944T	17928T	22410T
500	1500T	3000T	5000T	7500T	10500T	14000T	18000T	22500T

$s = ?$	$n=3$ $S(x-\bar{x})^2 =$	$n=4$ $S(x-\bar{x})^2 =$	$n=5$ $S(x-\bar{x})^2 =$	$n=6$ $S(x-\bar{x})^2 =$	$n=7$ $S(x-\bar{x})^2 =$	$n=8$ $S(x-\bar{x})^2 =$	$n=9$ $S(x-\bar{x})^2 =$	$n=10$ $S(x-\bar{x})^2 =$
501	1506T	3012T	5020T	7530T	10542T	14056T	18072T	22590T
502	1512T	3024T	5040T	7560T	10584T	14112T	18144T	22680T
503	1518T	3036T	5060T	7590T	10626T	14169T	18217T	22771T
504	1524T	3048T	5080T	7620T	10669T	14225T	18289T	22861T
505	1530T	3060T	5100T	7650T	10711T	14281T	18362T	22952T
506	1536T	3072T	5120T	7681T	10754T	14338T	18435T	23043T
507	1542T	3085T	5141T	7711T	10796T	14395T	18508T	23134T
508	1548T	3097T	5161T	7742T	10839T	14452T	18581T	23226T
509	1554T	3109T	5182T	7772T	10881T	14509T	18654T	23317T
510	1561T	3121T	5202T	7803T	10924T	14566T	18727T	23409T
511	1567T	3133T	5222T	7834T	10967T	14623T	18801T	23501T
512	1573T	3146T	5243T	7864T	11010T	14680T	18874T	23593T
513	1579T	3158T	5263T	7895T	11053T	14737T	18948T	23685T
514	1585T	3170T	5284T	7926T	11096T	14795T	19022T	23778T
515	1591T	3183T	5304T	7957T	11139T	14853T	19096T	23870T
516	1598T	3195T	5325T	7988T	11183T	14910T	19170T	23963T
517	1604T	3207T	5346T	8019T	11226T	14968T	19245T	24056T
518	1610T	3220T	5366T	8050T	11270T	15026T	19319T	24149T
519	1616T	3232T	5387T	8081T	11313T	15084T	19394T	24242T
520	1622T	3245T	5408T	8112T	11357T	15142T	19469T	24336T
521	1629T	3257T	5429T	8143T	11401T	15201T	19544T	24430T
522	1635T	3270T	5450T	8175T	11444T	15259T	19619T	24524T
523	1641T	3282T	5471T	8206T	11488T	15318T	19694T	24618T
524	1647T	3295T	5492T	8237T	11532T	15376T	19769T	24712T
525	1654T	3307T	5512T	8269T	11576T	15435T	19845T	24806T
526	1660T	3320T	5534T	8300T	11620T	15494T	19921T	24901T
527	1666T	3333T	5555T	8332T	11665T	15553T	19996T	24996T
528	1673T	3345T	5576T	8364T	11709T	15612T	20072T	25091T
529	1679T	3358T	5597T	8395T	11753T	15671T	20149T	25186T
530	1685T	3371T	5618T	8427T	11798T	15730T	20245T	25281T
531	1692T	3384T	5639T	8459T	11843T	15790T	20378T	25376T
532	1698T	3396T	5660T	8491T	11887T	15849T	20454T	25472T
533	1705T	3409T	5682T	8523T	11932T	15909T	20531T	25568T
534	1711T	3422T	5703T	8555T	11977T	15969T	20608T	25664T
535	1717T	3435T	5724T	8587T	12021T	16029T	20685T	25760T
536	1724T	3448T	5746T	8619T	12066T	16089T	20763T	25857T
537	1730T	3460T	5767T	8651T	12111T	16149T	20840T	25953T
538	1737T	3473T	5789T	8683T	12157T	16209T	20892T	26050T
539	1743T	3486T	5810T	8716T	12202T	16269T	20918T	26147T
540	1750T	3499T	5832T	8748T	12247T	16330T	20995T	26244T
541	1756T	3512T	5854T	8780T	12293T	16390T	21073T	26341T
542	1763T	3525T	5875T	8813T	12338T	16451T	21151T	26439T
543	1769T	3538T	5897T	8845T	12384T	16512T	21229T	26536T
544	1776T	3551T	5919T	8878T	12429T	16572T	21307T	26634T
545	1782T	3564T	5940T	8911T	12475T	16633T	21386T	26732T
546	1789T	3577T	5962T	8943T	12521T	16694T	21464T	26830T
547	1795T	3591T	5984T	8976T	12567T	16756T	21543T	26929T
548	1802T	3604T	6006T	9009T	12613T	16817T	21622T	27027T
549	1808T	3617T	6028T	9042T	12659T	16878T	21701T	27126T
550	1815T	3630T	6050T	9075T	12705T	16940T	21780T	27225T

$\frac{s}{\bar{x}} = ?$	$n=3$ $S(x-\bar{x})^2 =$	$n=4$ $S(x-\bar{x})^2 =$	$n=5$ $S(x-\bar{x})^2 =$	$n=6$ $S(x-\bar{x})^2 =$	$n=7$ $S(x-\bar{x})^2 =$	$n=8$ $S(x-\bar{x})^2 =$	$n=9$ $S(x-\bar{x})^2 =$	$n=10$ $S(x-\bar{x})^2 =$
551	1822T	3643T	6072T	9108T	12751T	17002T	21859T	27324T
552	1828T	3656T	6094T	9141T	12798T	17063T	21939T	27423T
553	1835T	3670T	6116T	9174T	12844T	17125T	22018T	27523T
554	1841T	3683T	6138T	9207T	12890T	17187T	22098T	27622T
555	1848T	3696T	6160T	9241T	12937T	17249T	22178T	27722T
556	1855T	3710T	6182T	9274T	12984T	17312T	22258T	27822T
557	1861T	3723T	6205T	9307T	13030T	17374T	22338T	27922T
558	1868T	3736T	6227T	9341T	13077T	17436T	22418T	28023T
559	1875T	3750T	6251T	9374T	13124T	17499T	22499T	28123T
560	1882T	3763T	6272T	9408T	13171T	17562T	22579T	28224T
561	1888T	3777T	6294T	9442T	13218T	17624T	22660T	28325T
562	1895T	3790T	6317T	9475T	13265T	17687T	22741T	28426T
563	1902T	3804T	6339T	9509T	13313T	17750T	22822T	28527T
564	1909T	3817T	6362T	9543T	13360T	17813T	22903T	28629T
565	1915T	3831T	6384T	9577T	13407T	17877T	22984T	28730T
566	1922T	3844T	6407T	9611T	13455T	17940T	23066T	28832T
567	1929T	3858T	6430T	9645T	13503T	18003T	23147T	28934T
568	1936T	3871T	6452T	9679T	13550T	18067T	23229T	29036T
569	1943T	3885T	6475T	9713T	13598T	18131T	23311T	29138T
570	1949T	3899T	6498T	9747T	13646T	18194T	23393T	29241T
571	1956T	3912T	6521T	9781T	13694T	18258T	23475T	29344T
572	1963T	3926T	6544T	9816T	13742T	18322T	23557T	29447T
573	1970T	3940T	6567T	9850T	13790T	18386T	23640T	29550T
574	1977T	3954T	6590T	9884T	13838T	18451T	23722T	29653T
575	1984T	3967T	6612T	9919T	13886T	18515T	23805T	29756T
576	1991T	3981T	6636T	9953T	13935T	18579T	23888T	29860T
577	1998T	3995T	6659T	9988T	13983T	18644T	23971T	29964T
578	2005T	4009T	6682T	10023T	14032T	18709T	24054T	30068T
579	2011T	4023T	6705T	10057T	14080T	18773T	24137T	30172T
580	2018T	4037T	6728T	10092T	14129T	18838T	24221T	30276T
581	2025T	4051T	6751T	10127T	14178T	18903T	24304T	30380T
582	2032T	4065T	6774T	10162T	14226T	18969T	24388T	30485T
583	2039T	4079T	6798T	10197T	14275T	19034T	24472T	30590T
584	2046T	4093T	6821T	10231T	14324T	19099T	24556T	30695T
585	2053T	4107T	6844T	10267T	14373T	19165T	24640T	30800T
586	2060T	4121T	6868T	10302T	14423T	19230T	24725T	30906T
587	2067T	4135T	6891T	10337T	14472T	19296T	24809T	31011T
588	2074T	4149T	6915T	10372T	14521T	19362T	24894T	31117T
589	2082T	4163T	6938T	10407T	14571T	19428T	24978T	31223T
590	2089T	4177T	6962T	10443T	14620T	19494T	25063T	31329T
591	2096T	4191T	6986T	10478T	14670T	19560T	25148T	31435T
592	2103T	4206T	7009T	10514T	14719T	19626T	25233T	31541T
593	2110T	4220T	7033T	10549T	14769T	19692T	25319T	31648T
594	2117T	4234T	7057T	10585T	14809T	19759T	25404T	31755T
595	2124T	4248T	7080T	10621T	14869T	19825T	25490T	31862T
596	2131T	4263T	7104T	10656T	14919T	19892T	25576T	31969T
597	2138T	4277T	7128T	10692T	14969T	19959T	25661T	32077T
598	2146T	4291T	7152T	10728T	15019T	20026T	25747T	32184T
599	2153T	4306T	7176T	10764T	15070T	20093T	25834T	32292T
600	2160T	4320T	7200T	10800T	15120T	20160T	25920T	32400T

$S_{\bar{x}} = ?$	$n=3$ $S(x-\bar{x})^2 =$	$n=4$ $S(x-\bar{x})^2 =$	$n=5$ $S(x-\bar{x})^2 =$	$n=6$ $S(x-\bar{x})^2 =$	$n=7$ $S(x-\bar{x})^2 =$	$n=8$ $S(x-\bar{x})^2 =$	$n=9$ $S(x-\bar{x})^2 =$	$n=10$ $S(x-\bar{x})^2 =$
601	2167T	4334T	7224T	10836T	15170T	20227T	26006T	32508T
602	2174T	4349T	7248T	10872T	15221T	20295T	26093T	32616T
603	2182T	4363T	7272T	10908T	15272T	20362T	26180T	32725T
604	2189T	4378T	7296T	10944T	15322T	20430T	26267T	32833T
605	2196T	4392T	7320T	10981T	15373T	20497T	26354T	32942T
606	2203T	4407T	7345T	11017T	15424T	20565T	26441T	33051T
607	2211T	4421T	7369T	11053T	15475T	20633T	26528T	33160T
608	2218T	4436T	7393T	11090T	15526T	20701T	26616T	33270T
609	2225T	4451T	7418T	11126T	15577T	20769T	26703T	33379T
610	2233T	4465T	7442T	11163T	15628T	20838T	26791T	33489T
611	2240T	4480T	7466T	11200T	15679T	20906T	26879T	33599T
612	2247T	4495T	7491T	11236T	15731T	20974T	26967T	33709T
613	2255T	4509T	7515T	11273T	15782T	21043T	27055T	33819T
614	2262T	4524T	7540T	11310T	15834T	21112T	27144T	33930T
615	2269T	4539T	7564T	11347T	15886T	21181T	27232T	34040T
616	2277T	4553T	7589T	11384T	15937T	21250T	27321T	34151T
617	2284T	4568T	7614T	11421T	15989T	21319T	27410T	34262T
618	2292T	4583T	7638T	11458T	16041T	21388T	27499T	34373T
619	2299T	4598T	7663T	11495T	16093T	21457T	27588T	34484T
620	2306T	4613T	7688T	11532T	16145T	21526T	27677T	34596T
621	2314T	4628T	7713T	11569T	16197T	21596T	27766T	34708T
622	2321T	4643T	7738T	11607T	16249T	21666T	27856T	34820T
623	2329T	4658T	7763T	11644T	16301T	21735T	27945T	34932T
624	2336T	4673T	7788T	11681T	16354T	21805T	28035T	35044T
625	2344T	4687T	7812T	11719T	16406T	21875T	28125T	35156T
626	2351T	4703T	7838T	11756T	16459T	21945T	28215T	35269T
627	2359T	4718T	7863T	11794T	16511T	22015T	28305T	35382T
628	2366T	4733T	7888T	11832T	16564T	22086T	28396T	35495T
629	2374T	4748T	7913T	11869T	16617T	22156T	28486T	35608T
630	2381T	4763T	7938T	11907T	16670T	22226T	28577T	35721T
631	2389T	4778T	7963T	11945T	16723T	22297T	28668T	35834T
632	2397T	4793T	7988T	11983T	16776T	22368T	28759T	35948T
633	2404T	4808T	8014T	12021T	16829T	22439T	28850T	36062T
634	2412T	4823T	8039T	12059T	16882T	22510T	28941T	36176T
635	2419T	4839T	8064T	12097T	16935T	22581T	29032T	36290T
636	2427T	4854T	8090T	12135T	16989T	22652T	29124T	36405T
637	2435T	4869T	8115T	12173T	17042T	22723T	29215T	36519T
638	2442T	4885T	8141T	12211T	17096T	22794T	29307T	36634T
639	2450T	4900T	8166T	12250T	17149T	22866T	29399T	36749T
640	2458T	4915T	8192T	12288T	17203T	22938T	29491T	36864T
641	2465T	4931T	8218T	12326T	17257T	23009T	29583T	36979T
642	2473T	4946T	8243T	12365T	17311T	23081T	29676T	37095T
643	2480T	4961T	8269T	12403T	17365T	23153T	29768T	37210T
644	2488T	4977T	8295T	12442T	17419T	23225T	29861T	37326T
645	2496T	4992T	8320T	12481T	17473T	23297T	29954T	37442T
646	2504T	5008T	8346T	12519T	17527T	23370T	30047T	37558T
647	2512T	5023T	8372T	12558T	17582T	23442T	30140T	37675T
648	2519T	5039T	8398T	12597T	17636T	23515T	30233T	37791T
649	2527T	5054T	8424T	12636T	17690T	23587T	30326T	37908T
650	2535T	5070T	8450T	12675T	17745T	23660T	30420T	38025T

$S_{\bar{x}} = ?$	$n=3$ $S(x-\bar{x})^2 =$	$n=4$ $S(x-\bar{x})^2 =$	$n=5$ $S(x-\bar{x})^2 =$	$n=6$ $S(x-\bar{x})^2 =$	$n=7$ $S(x-\bar{x})^2 =$	$n=8$ $S(x-\bar{x})^2 =$	$n=9$ $S(x-\bar{x})^2 =$	$n=10$ $S(x-\bar{x})^2 =$
651	2543T	5086T	8476T	12714T	17800T	23733T	30514T	38142T
652	2551T	5101T	8502T	12753T	17854T	23806T	30607T	38259T
653	2558T	5117T	8528T	12792T	17909T	23879T	30701T	38377T
654	2566T	5133T	8554T	12831T	17964T	23952T	30796T	38494T
655	2574T	5148T	8580T	12871T	18019T	24025T	30890T	38612T
656	2582T	5164T	8607T	12910T	18074T	24099T	30984T	38730T
657	2590T	5180T	8633T	12949T	18129T	24172T	31079T	38848T
658	2598T	5196T	8659T	12989T	18184T	24246T	31173T	38967T
659	2606T	5211T	8686T	13028T	18240T	24320T	31268T	39085T
660	2613T	5227T	8712T	13068T	18295T	24394T	31363T	39204T
661	2622T	5243T	8738T	13108T	18351T	24466T	31458T	39323T
662	2629T	5259T	8765T	13147T	18406T	24542T	31554T	39442T
663	2637T	5275T	8791T	13187T	18462T	24616T	31649T	39561T
664	2645T	5291T	8818T	13227T	18518T	24690T	31745T	39681T
665	2653T	5307T	8844T	13267T	18573T	24765T	31840T	39800T
666	2661T	5323T	8871T	13307T	18629T	24839T	31936T	39920T
667	2669T	5339T	8898T	13347T	18685T	24914T	32032T	40040T
668	2677T	5355T	8924T	13387T	18741T	24989T	32128T	40160T
669	2685T	5371T	8951T	13427T	18798T	25063T	32224T	40280T
670	2693T	5387T	8978T	13467T	18854T	25138T	32321T	40401T
671	2701T	5403T	9005T	13507T	18910T	25213T	32417T	40522T
672	2710T	5419T	9032T	13548T	18967T	25289T	32514T	40643T
673	2718T	5435T	9059T	13588T	19023T	25364T	32611T	40764T
674	2726T	5451T	9086T	13628T	19080T	25439T	32708T	40885T
675	2734T	5467T	9112T	13669T	19136T	25515T	32805T	41006T
676	2742T	5484T	9140T	13709T	19193T	25591T	32902T	41128T
677	2750T	5500T	9167T	13750T	19250T	25666T	33000T	41250T
678	2758T	5516T	9194T	13791T	19307T	25742T	33097T	41372T
679	2766T	5532T	9221T	13831T	19364T	25818T	33195T	41414T
680	2774T	5549T	9248T	13872T	19421T	25894T	33293T	41616T
681	2783T	5565T	9275T	13913T	19478T	25971T	33391T	41738T
682	2791T	5581T	9302T	13954T	19535T	26047T	33489T	41861T
683	2799T	5598T	9330T	13995T	19593T	26123T	33587T	41984T
684	2807T	5614T	9357T	14036T	19650T	26200T	33686T	42107T
685	2815T	5631T	9384T	14077T	19707T	26277T	33784T	42230T
686	2824T	5647T	9412T	14118T	19765T	26353T	33883T	42354T
687	2832T	5664T	9439T	14159T	19823T	26430T	33982T	42477T
688	2840T	5680T	9467T	14200T	19880T	26507T	34081T	42601T
689	2848T	5697T	9494T	14242T	19938T	26584T	34180T	42725T
690	2857T	5713T	9522T	14283T	19996T	26662T	34279T	42849T
691	2865T	5730T	9550T	14324T	20054T	26739T	34379T	42973T
692	2873T	5746T	9577T	14366T	20112T	26816T	34478T	43098T
693	2881T	5763T	9605T	14407T	20170T	26894T	34578T	43222T
694	2890T	5780T	9633T	14449T	20229T	26972T	34678T	43347T
695	2898T	5796T	9660T	14491T	20287T	27049T	34778T	43472T
696	2906T	5813T	9688T	14532T	20345T	27127T	34878T	43597T
697	2915T	5830T	9716T	14574T	20404T	27205T	34978T	43723T
698	2923T	5846T	9744T	14616T	20463T	27283T	35079T	43848T
699	2932T	5863T	9772T	14658T	20521T	27362T	35179T	43974T
700	2940T	5880T	9800T	14700T	20580T	27440T	35280T	44100T

$s_{\bar{x}} = ?$	$n=3$ $S(x-\bar{x})^2 =$	$n=4$ $S(x-\bar{x})^2 =$	$n=5$ $S(x-\bar{x})^2 =$	$n=6$ $S(x-\bar{x})^2 =$	$n=7$ $S(x-\bar{x})^2 =$	$n=8$ $S(x-\bar{x})^2 =$	$n=9$ $S(x-\bar{x})^2 =$	$n=10$ $S(x-\bar{x})^2 =$
701	2948 T	5897 T	9828 T	14742 T	20639 T	27518 T	35381 T	44226 T
702	2957 T	5914 T	9856 T	14784 T	20698 T	27597 T	35482 T	44352 T
703	2965 T	5931 T	9884 T	14826 T	20757 T	27676 T	35583 T	44479 T
704	2974 T	5947 T	9912 T	14868 T	20816 T	27754 T	35684 T	44605 T
705	2982 T	5964 T	9940 T	14911 T	20875 T	27833 T	35786 T	44732 T
706	2991 T	5981 T	9969 T	14953 T	20934 T	27912 T	35887 T	44859 T
707	2999 T	5998 T	9997 T	14995 T	20994 T	27992 T	35989 T	44986 T
708	3008 T	6015 T	10025 T	15038 T	21053 T	28071 T	36091 T	45114 T
709	3016 T	6032 T	10054 T	15080 T	21113 T	28150 T	36193 T	45241 T
710	3025 T	6049 T	10082 T	15123 T	21172 T	28230 T	36295 T	45369 T
711	3033 T	6066 T	10110 T	15166 T	21232 T	28309 T	36398 T	45497 T
712	3042 T	6083 T	10139 T	15208 T	21292 T	28389 T	36500 T	45625 T
713	3050 T	6100 T	10167 T	15251 T	21351 T	28469 T	36603 T	45753 T
714	3059 T	6118 T	10196 T	15294 T	21411 T	28549 T	36705 T	45882 T
715	3067 T	6135 T	10224 T	15337 T	21471 T	28629 T	36808 T	46010 T
716	3076 T	6152 T	10253 T	15380 T	21532 T	28709 T	36911 T	46139 T
717	3085 T	6169 T	10282 T	15423 T	21592 T	28789 T	37014 T	46268 T
718	3093 T	6185 T	10310 T	15466 T	21652 T	28869 T	37118 T	46397 T
719	3102 T	6204 T	10339 T	15509 T	21712 T	28950 T	37221 T	46526 T
720	3110 T	6221 T	10368 T	15552 T	21773 T	29030 T	37325 T	46656 T
721	3119 T	6238 T	10397 T	15595 T	21833 T	29111 T	37429 T	46786 T
722	3128 T	6255 T	10426 T	15639 T	21894 T	29192 T	37532 T	46916 T
723	3136 T	6273 T	10455 T	15682 T	21955 T	29273 T	37636 T	47046 T
724	3145 T	6290 T	10484 T	15725 T	22015 T	29354 T	37741 T	47176 T
725	3154 T	6307 T	10512 T	15769 T	22076 T	29435 T	37845 T	47306 T
726	3162 T	6325 T	10542 T	15812 T	22137 T	29516 T	37949 T	47437 T
727	3171 T	6342 T	10571 T	15856 T	22198 T	29598 T	38054 T	47568 T
728	3180 T	6360 T	10600 T	15900 T	22259 T	29679 T	38159 T	47699 T
729	3189 T	6377 T	10629 T	15943 T	22321 T	29761 T	38264 T	47830 T
730	3197 T	6395 T	10658 T	15987 T	22382 T	29842 T	38369 T	47961 T
731	3206 T	6412 T	10687 T	16031 T	22443 T	29924 T	38474 T	48092 T
732	3215 T	6430 T	10716 T	16075 T	22505 T	30006 T	38579 T	48224 T
733	3224 T	6447 T	10746 T	16119 T	22566 T	30088 T	38685 T	48356 T
734	3233 T	6465 T	10775 T	16163 T	22628 T	30170 T	38790 T	48488 T
735	3241 T	6483 T	10804 T	16207 T	22689 T	30253 T	38896 T	48620 T
736	3250 T	6500 T	10834 T	16251 T	22751 T	30335 T	39002 T	48753 T
737	3259 T	6518 T	10863 T	16295 T	22813 T	30417 T	39108 T	48885 T
738	3268 T	6535 T	10893 T	16339 T	22875 T	30500 T	39214 T	49018 T
739	3277 T	6553 T	10922 T	16384 T	22937 T	30583 T	39321 T	49151 T
740	3286 T	6571 T	10952 T	16428 T	22999 T	30666 T	39427 T	49284 T
741	3294 T	6589 T	10982 T	16472 T	23061 T	30749 T	39534 T	49417 T
742	3303 T	6607 T	11011 T	16517 T	23124 T	30831 T	39641 T	49551 T
743	3312 T	6625 T	11041 T	16561 T	23186 T	30915 T	39748 T	49684 T
744	3321 T	6642 T	11071 T	16606 T	23249 T	30998 T	39855 T	49818 T
745	3330 T	6660 T	11100 T	16651 T	23311 T	31081 T	39962 T	49952 T
746	3339 T	6678 T	11130 T	16695 T	23374 T	31165 T	40069 T	50086 T
747	3348 T	6696 T	11160 T	16740 T	23436 T	31249 T	40177 T	50220 T
748	3357 T	6714 T	11190 T	16785 T	23499 T	31332 T	40284 T	50355 T
749	3366 T	6732 T	11220 T	16830 T	23562 T	31416 T	40392 T	50490 T
750	3375 T	6750 T	11250 T	16875 T	23625 T	31500 T	40500 T	50625 T

$s_{\bar{x}}=?$	$n=3$ $S(x-\bar{x})^2$	$n=4$ $S(x-\bar{x})^2$	$n=5$ $S(x-\bar{x})^2$	$n=6$ $S(x-\bar{x})^2$	$n=7$ $S(x-\bar{x})^2$	$n=8$ $S(x-\bar{x})^2$	$n=9$ $S(x-\bar{x})^2$	$n=10$ $S(x-\bar{x})^2$
755	3420T	6840T	11400T	17101T	23941T	31921T	41042T	51302T
760	3466T	6931T	11552T	17338T	24259T	32346T	41587T	51984T
765	3511T	7023T	11704T	17556T	24579T	32773T	42136T	52670T
770	3557T	7115T	11858T	17787T	24902T	33202T	42689T	53361T
775	3604T	7207T	12012T	18019T	25226T	33635T	43245T	54056T
780	3650T	7301T	12168T	18252T	25553T	34070T	43805T	54756T
785	3697T	7395T	12324T	18487T	25881T	34509T	44368T	55460T
790	3745T	7489T	12482T	18723T	26212T	34950T	44935T	56169T
795	3792T	7584T	12640T	18961T	26545T	35393T	45506T	56882T
800	3840T	7680T	12800T	19200T	26880T	35840T	46080T	57600T
805	3888T	7776T	12960T	19441T	27217T	36289T	46658T	58322T
810	3937T	7873T	13122T	19683T	27556T	36742T	47239T	59049T
815	3985T	7971T	13284T	19927T	27897T	37197T	47824T	59780T
820	4034T	8069T	13448T	20172T	28241T	37654T	48413T	60516T
825	4084T	8167T	13612T	20419T	28586T	38115T	49005T	61256T
830	4133T	8267T	13778T	20667T	28934T	38578T	49601T	62001T
835	4183T	8367T	13944T	20917T	29283T	39045T	50202T	62750T
840	4234T	8467T	14112T	21168T	29635T	39514T	50803T	63504T
845	4284T	8568T	14280T	21421T	29989T	39985T	51410T	64262T
850	4335T	8670T	14450T	21675T	30345T	40460T	52020T	65025T
855	4387T	8773T	14624T	21937T	30711T	40949T	52648T	65810T
860	4438T	8875T	14792T	22188T	31063T	41418T	53251T	66564T
865	4489T	8979T	14964T	22447T	31425T	41901T	53872T	67340T
870	4541T	9083T	15138T	22707T	31790T	42386T	54497T	68121T
875	4594T	9187T	15312T	22969T	32156T	42875T	55125T	68906T
880	4646T	9293T	15488T	23232T	32525T	43366T	55767T	69696T
885	4699T	9399T	15664T	23497T	32895T	43861T	56392T	70490T
890	4753T	9505T	15842T	23763T	33268T	44358T	57031T	71289T
895	4806T	9612T	16020T	24031T	33643T	44857T	57674T	72092T
900	4860T	9720T	16200T	24300T	34020T	45360T	58320T	72900T
905	4914T	9828T	16380T	24571T	34399T	45865T	58970T	73712T
910	4969T	9937T	16562T	24843T	34780T	46374T	59632T	74529T
915	5023T	10047T	16744T	25117T	35163T	46885T	60280T	75350T
920	5078T	10157T	16928T	25392T	35549T	47398T	60941T	76176T
925	5134T	10267T	17112T	25669T	35936T	47915T	61605T	77006T
930	5189T	10379T	17298T	25947T	36326T	48434T	62273T	77841T
935	5245T	10491T	17484T	26227T	36717T	48957T	62944T	78680T
940	5302T	10603T	17672T	26508T	37111T	49482T	63619T	79524T
945	5358T	10716T	17860T	26781T	37507T	50009T	64298T	80372T
950	5415T	10830T	18050T	27075T	37905T	50540T	64980T	81225T
955	5472T	10944T	18240T	27360T	38305T	51073T	65666T	82082T
960	5530T	11059T	18432T	27648T	38707T	51610T	66355T	82944T
965	5587T	11175T	18624T	27937T	39111T	52149T	67048T	83810T
970	5645T	11290T	18818T	28227T	39518T	52690T	67745T	84681T
975	5704T	11407T	19012T	28519T	39926T	53235T	68445T	85556T
980	5762T	11525T	19208T	28812T	40337T	53782T	69149T	86436T
985	5821T	11643T	19404T	29107T	40749T	54333T	69856T	87320T
990	5881T	11761T	19602T	29403T	41164T	54886T	70567T	88209T
995	5940T	11880T	19800T	29701T	41581T	55441T	71282T	89102T
1000	6000T	12000T	20000T	30000T	42000T	56000T	72000T	90000T

15. F-1 VÄÄRTUSED (FISCHERI KRITEERIUM) p = 5% ja 1% PUHUL
(F_{5%} on trükitud hariliku ja F_{1%} rasvase šriftiga)

VA		VA suuremale s ²											
		1	2	3	4	5	6	7	8	9	10	11	12
VA väiksemale s ²	1	161 4 052	200 4 999	216 5 403	225 5 625	230 5 764	234 5 889	237 5 928	239 5 981	241 6 022	242 6 056	243 6 082	244 6 106
	2	18,51 98,49	19,00 99,01	19,16 99,17	19,25 99,25	19,30 99,30	19,33 99,33	19,36 99,34	19,37 99,36	19,38 99,38	19,39 99,40	19,40 99,41	19,41 99,42
	3	10,13 34,12	9,55 30,81	9,28 29,46	9,12 28,71	9,01 28,24	8,94 27,91	8,88 27,67	8,84 27,49	8,81 27,34	8,78 27,23	8,76 27,13	8,74 27,05
	4	7,71 21,20	6,94 18,00	6,59 16,69	6,39 15,98	6,26 15,52	6,16 15,21	6,09 14,98	6,04 14,80	6,00 14,66	5,96 14,54	5,93 14,45	5,91 14,37
	5	6,61 16,26	5,79 13,27	5,41 12,06	5,19 11,39	5,05 10,97	4,95 10,67	4,88 10,45	4,82 10,27	4,78 10,15	4,74 10,05	4,70 9,96	4,68 9,89
	6	5,99 13,74	5,14 10,92	4,76 9,78	4,53 9,15	4,39 8,75	4,28 8,47	4,21 8,26	4,15 8,10	4,10 7,98	4,06 7,87	4,03 7,79	4,00 7,72
	7	5,59 12,25	4,74 9,55	4,35 8,45	4,12 7,85	3,97 7,46	3,87 7,19	3,79 7,00	3,73 6,84	3,68 6,71	3,63 6,62	3,60 6,54	3,57 6,47
	8	5,32 11,26	4,46 8,65	4,07 7,59	3,84 7,01	3,69 6,63	3,58 6,37	3,50 6,19	3,44 6,03	3,39 5,91	3,34 5,82	3,31 5,74	3,28 5,67
	9	5,12 10,56	4,26 8,02	3,86 6,99	3,63 6,42	3,48 6,06	3,37 5,80	3,29 5,62	3,23 5,47	3,18 5,35	3,13 5,26	3,10 5,18	3,07 5,11
	10	4,96 10,04	4,10 7,56	3,71 6,55	3,48 5,99	3,33 5,64	3,22 5,39	3,14 5,21	3,07 5,06	3,02 4,95	2,97 4,85	2,94 4,78	2,91 4,71
	11	4,84 9,85	3,98 7,20	3,59 6,22	3,36 5,67	3,20 5,32	3,09 5,07	3,01 4,88	2,95 4,74	2,90 4,63	2,86 4,54	2,82 4,46	2,79 4,40
	12	4,75 9,33	3,88 6,93	3,49 5,95	3,26 5,41	3,11 5,06	3,00 4,82	2,92 4,65	2,85 4,50	2,80 4,39	2,76 4,30	2,72 4,22	2,69 4,16
	13	4,67 9,07	3,80 6,70	3,41 5,74	3,18 5,20	3,02 4,86	2,92 4,62	2,84 4,44	2,77 4,30	2,72 4,19	2,67 4,10	2,63 4,02	2,60 3,96
	14	4,60 8,86	3,74 6,51	3,34 5,56	3,11 5,03	2,96 4,69	2,85 4,46	2,77 4,28	2,70 4,14	2,65 4,03	2,60 3,94	2,56 3,86	2,53 3,80
	15	4,54 8,68	3,68 6,36	3,29 5,42	3,06 4,89	2,90 4,56	2,79 4,32	2,70 4,14	2,64 4,00	2,59 3,89	2,55 3,80	2,51 3,73	2,48 3,67
	16	4,49 8,53	3,63 6,23	3,24 5,29	3,01 4,77	2,85 4,44	2,74 4,20	2,66 4,03	2,59 3,89	2,54 3,78	2,49 3,69	2,45 3,61	2,42 3,55
	17	4,45 8,40	3,59 6,11	3,20 5,18	2,96 4,67	2,81 4,34	2,70 4,10	2,62 3,93	2,55 3,79	2,50 3,68	2,45 3,59	2,41 3,52	2,38 3,45

VA suuremale s²

14	16	20	24	30	40	50	75	100	200	500	∞	VA
245 6 142	246 6 169	248 6 208	249 6 234	250 6 258	251 6 286	252 6 302	253 6 323	253 6 334	254 6 352	254 6 361	254 6 366	1
19,42 99,43	19,43 99,44	19,44 99,45	19,45 99,46	19,46 99,47	19,47 99,48	19,47 99,48	19,48 99,49	19,49 99,49	19,49 99,49	19,50 99,50	19,50 99,50	2
8,71 26,92	8,69 26,83	8,66 26,69	8,64 26,60	8,62 26,50	8,60 26,41	8,58 26,35	8,57 26,27	8,56 26,23	8,54 26,18	8,54 26,14	8,53 26,12	3
5,87 14,24	5,84 14,15	5,80 14,02	5,77 13,93	5,74 13,83	5,71 13,74	5,70 13,69	5,68 13,61	5,66 13,57	5,65 13,52	5,64 13,48	5,63 13,46	4
4,64 9,77	4,60 9,68	4,56 9,55	4,53 9,47	4,50 9,38	4,46 9,29	4,44 9,24	4,42 9,17	4,40 9,13	4,38 9,07	4,37 9,04	4,36 9,02	5
3,96 7,60	3,92 7,52	3,87 7,39	3,84 7,31	3,81 7,23	3,77 7,14	3,75 7,09	3,72 7,02	3,71 6,99	3,69 6,94	3,68 6,90	3,67 6,88	6
3,52 6,35	3,49 6,27	3,44 6,15	3,41 6,07	3,38 5,98	3,34 5,90	3,32 5,85	3,29 5,78	3,28 5,75	3,25 5,70	3,24 5,67	3,23 5,65	7
3,23 5,56	3,20 5,48	3,15 5,36	3,12 5,28	3,08 5,20	3,05 5,11	3,03 5,06	3,00 5,00	2,98 4,96	2,96 4,91	2,94 4,88	2,93 4,86	8
3,02 5,00	2,98 4,92	2,93 4,80	2,90 4,73	2,86 4,64	2,82 4,56	2,80 4,51	2,77 4,45	2,76 4,41	2,73 4,36	2,72 4,33	2,71 4,31	9
2,86 4,60	2,82 4,52	2,77 4,41	2,74 4,33	2,70 4,25	2,67 4,17	2,64 4,12	2,61 4,05	2,59 4,01	2,56 3,96	2,55 3,93	2,54 3,91	10
2,74 4,29	2,70 4,21	2,65 4,10	2,61 4,02	2,57 3,94	2,53 3,86	2,50 3,80	2,47 3,74	2,45 3,70	2,42 3,66	2,41 3,62	2,40 3,60	11
2,64 4,05	2,60 3,98	2,54 3,86	2,50 3,78	2,46 3,70	2,42 3,61	2,40 3,56	2,36 3,49	2,35 3,46	2,32 3,41	2,31 3,38	2,30 3,36	12
2,55 3,85	2,51 3,78	2,46 3,67	2,42 3,59	2,38 3,51	2,34 3,42	2,32 3,37	2,28 3,30	2,26 3,27	2,24 3,21	2,22 3,18	2,21 3,16	13
2,48 3,70	2,44 3,62	2,39 3,51	2,35 3,43	2,31 3,34	2,27 3,26	2,24 3,21	2,21 3,14	2,19 3,11	2,16 3,06	2,14 3,02	2,13 3,00	14
2,43 3,56	2,39 3,48	2,33 3,36	2,29 3,29	2,25 3,20	2,21 3,12	2,18 3,07	2,15 3,00	2,12 2,97	2,10 2,92	2,08 2,89	2,07 2,87	15
2,37 3,45	2,33 3,37	2,28 3,25	2,24 3,18	2,20 3,10	2,16 3,01	2,13 2,96	2,09 2,89	2,07 2,86	2,04 2,80	2,02 2,77	2,01 2,75	16
2,33 3,35	2,29 3,27	2,23 3,16	2,19 3,08	2,15 3,00	2,11 2,92	2,08 2,86	2,04 2,79	2,02 2,76	1,99 2,70	1,97 2,67	1,96 2,65	17

		VA suuremale s ²											
VA	VA väiksemale s ²												
	1	2	3	4	5	6	7	8	9	10	11	12	
18	4,41	3,55	3,16	2,93	2,77	2,66	2,58	2,51	2,46	2,41	2,37	2,34	
	8,28	6,01	5,09	4,58	4,25	4,01	3,85	3,71	3,60	3,51	3,44	3,37	
19	4,38	3,52	3,13	2,90	2,74	2,63	2,55	2,48	2,43	2,38	2,34	2,31	
	8,18	5,93	5,01	4,50	4,17	3,94	3,77	3,63	3,52	3,43	3,36	3,30	
20	4,35	3,49	3,10	2,87	2,71	2,60	2,52	2,45	2,40	2,35	2,31	2,28	
	8,10	5,85	4,94	4,43	4,10	3,87	3,71	3,56	3,45	3,37	3,30	3,23	
21	4,32	3,47	3,07	2,84	2,68	2,57	2,49	2,42	2,37	2,32	2,28	2,25	
	8,02	5,78	4,87	4,37	4,04	3,81	3,65	3,51	3,40	3,31	3,24	3,17	
22	4,30	3,44	3,05	2,82	2,66	2,55	2,47	2,40	2,35	2,30	2,26	2,23	
	7,94	5,72	4,82	4,31	3,99	3,76	3,59	3,45	3,35	3,26	3,18	3,12	
23	4,28	3,42	3,03	2,80	2,64	2,53	2,45	2,38	2,32	2,28	2,24	2,20	
	7,88	5,66	4,76	4,26	3,94	3,71	3,54	3,41	3,30	3,21	3,14	3,07	
24	4,26	3,40	3,01	2,78	2,62	2,51	2,43	2,36	2,30	2,26	2,22	2,18	
	7,82	5,64	4,72	4,22	3,90	3,67	3,50	3,36	3,25	3,17	3,09	3,03	
25	4,24	3,38	2,99	2,76	2,60	2,49	2,41	2,34	2,28	2,24	2,20	2,16	
	7,77	5,57	4,68	4,18	3,86	3,63	3,46	3,32	3,21	3,13	3,05	2,99	
26	4,22	3,37	2,98	2,74	2,59	2,47	2,39	2,32	2,27	2,22	2,18	2,15	
	7,72	5,53	4,64	4,14	3,82	3,59	3,42	3,29	3,17	3,09	3,02	2,96	
27	4,21	3,35	2,96	2,73	2,57	2,46	2,37	2,30	2,25	2,20	2,16	3,13	
	7,68	5,49	4,60	4,11	3,79	3,56	3,39	3,26	3,14	3,06	2,98	2,93	
28	4,20	3,34	2,95	2,71	2,56	2,44	2,36	2,29	2,24	2,19	2,15	2,12	
	7,64	5,45	4,57	4,07	3,76	3,53	3,36	3,23	3,11	3,03	2,95	2,90	
29	4,18	3,33	2,93	2,70	2,54	2,43	2,35	2,28	2,22	2,18	2,14	2,10	
	7,60	5,42	4,54	4,04	3,73	3,50	3,33	3,20	3,08	3,00	2,92	2,87	
30	4,17	3,32	2,92	2,69	2,53	2,42	2,34	2,27	2,21	2,16	2,12	2,09	
	7,56	5,39	4,51	4,02	3,70	3,47	3,30	3,17	3,06	2,98	2,90	2,84	
32	4,15	3,30	2,90	2,67	2,51	2,40	2,32	2,25	2,19	2,14	2,10	2,07	
	7,50	5,34	4,46	3,97	3,66	3,42	3,25	3,12	3,01	2,94	2,86	2,80	
34	4,13	3,28	2,88	2,65	2,49	2,39	2,30	2,23	2,17	2,12	2,08	2,05	
	7,44	5,29	4,42	3,93	3,61	3,38	3,21	3,08	2,97	2,89	2,82	2,76	
36	4,11	3,26	2,86	2,63	2,48	2,36	2,28	2,21	2,15	2,10	2,06	2,03	
	7,39	5,25	4,38	3,89	3,58	3,35	3,18	3,04	2,94	2,86	3,78	2,72	
38	4,10	3,25	2,85	2,65	2,46	2,35	2,26	2,19	2,14	2,09	2,05	2,02	
	7,35	5,21	4,34	3,86	3,54	3,32	3,15	3,02	2,91	2,82	2,75	2,69	
40	4,08	3,23	2,84	2,61	2,45	2,34	2,25	2,18	2,12	2,07	2,04	2,00	
	7,31	5,18	4,31	3,83	3,51	3,29	3,12	2,99	2,88	2,80	2,73	2,66	

VA suuremale s^2

14	16	20	24	30	40	50	75	100	200	500	∞	VA
2,29 3,27	2,25 3,19	2,19 3,07	2,15 3,00	2,11 2,91	2,07 2,83	2,04 2,78	2,00 2,71	1,98 2,68	1,95 2,62	1,93 2,59	1,92 2,57	18
2,26 3,19	2,21 3,12	2,15 3,00	2,11 2,92	2,07 2,84	2,02 2,76	2,00 2,70	1,96 2,63	1,94 2,60	1,91 2,54	1,90 2,51	1,88 2,49	19
2,23 3,13	2,18 3,05	2,12 2,94	2,08 2,86	2,04 2,77	1,99 2,69	1,96 2,63	1,92 2,56	1,90 2,53	1,87 2,47	1,85 2,44	1,84 2,42	20
2,20 3,07	2,15 2,99	2,09 2,88	2,05 2,80	2,00 2,72	1,96 2,63	1,93 2,58	1,89 2,51	1,87 2,47	1,84 2,42	1,82 2,38	1,81 2,36	21
2,18 3,02	2,13 2,94	2,07 2,83	2,03 2,75	1,98 2,67	1,93 2,58	1,91 2,53	1,87 2,46	1,84 2,42	1,81 2,37	1,80 2,33	1,78 2,31	22
2,14 2,97	2,10 2,89	2,04 2,78	2,00 2,70	1,96 2,62	1,91 2,53	1,88 2,48	1,84 2,41	1,82 2,37	1,79 2,32	1,77 2,28	1,76 2,26	23
2,13 2,93	2,09 2,85	2,02 2,74	1,98 2,66	1,94 2,58	1,89 2,49	1,86 2,44	1,82 2,36	1,80 2,33	1,76 2,27	1,74 2,23	1,73 2,21	24
2,11 2,89	2,06 2,81	2,00 2,70	1,96 2,62	1,92 2,54	1,87 2,45	1,84 2,40	1,80 2,32	1,77 2,29	1,74 2,23	1,72 2,19	1,71 2,17	25
2,10 2,86	2,05 2,77	1,99 2,66	1,95 2,58	1,90 2,50	1,85 2,41	1,82 2,36	1,78 2,28	1,76 2,25	1,72 2,19	1,70 2,15	1,69 2,13	26
2,08 2,83	2,03 2,74	1,97 2,63	1,93 2,55	1,88 2,47	1,84 2,38	1,80 2,33	1,76 2,25	1,74 2,21	1,71 2,16	1,68 2,12	1,67 2,10	27
2,06 2,80	2,02 2,71	1,96 2,60	1,91 2,52	1,87 2,44	1,81 2,35	1,78 2,30	1,75 2,22	1,72 2,18	1,69 2,13	1,67 2,09	1,65 2,06	28
2,05 2,77	2,00 2,68	1,94 2,57	1,90 2,49	1,85 2,41	1,80 2,32	1,77 2,27	1,73 2,19	1,71 2,15	1,68 2,10	1,65 2,06	1,64 2,03	29
2,04 2,74	1,99 2,66	1,93 2,55	1,89 2,47	1,84 2,38	1,79 2,29	1,76 2,24	1,72 2,16	1,69 2,13	1,66 2,07	1,64 2,03	1,62 2,01	30
2,02 2,70	1,97 2,62	1,91 2,51	1,86 2,42	1,82 2,34	1,76 2,25	1,74 2,20	1,69 2,12	1,67 2,08	1,64 2,02	1,61 1,98	1,59 1,96	32
2,00 2,66	1,95 2,58	1,89 2,47	1,84 2,38	1,80 2,30	1,74 2,21	1,71 2,15	1,67 2,08	1,64 2,04	1,61 1,98	1,59 1,94	1,57 1,91	34
1,98 2,62	1,93 2,54	1,87 2,43	1,82 2,35	1,78 2,26	1,72 2,17	1,69 2,12	1,65 2,04	1,62 2,00	1,59 1,94	1,56 1,90	1,55 1,87	36
1,96 2,59	1,92 2,51	1,85 2,40	1,80 2,32	1,76 2,22	1,71 2,14	1,67 2,08	1,63 2,00	1,60 1,97	1,57 1,90	1,54 1,86	1,53 1,84	38
1,95 2,56	1,90 2,49	1,84 2,37	1,79 2,29	1,74 2,20	1,69 2,11	1,66 2,05	1,61 1,97	1,59 1,94	1,55 1,88	1,53 1,84	1,51 1,81	40

VA	VA suuremale s^2											
	1	2	3	4	5	6	7	8	9	10	11	12
42	4,07	3,22	2,83	2,59	2,44	2,32	2,24	2,17	2,11	2,06	2,02	1,99
	7,27	5,15	4,29	3,80	3,49	3,26	3,10	2,96	2,86	2,77	2,70	2,64
44	4,06	3,21	2,82	2,58	2,43	2,31	2,23	2,16	2,10	2,05	2,01	1,98
	7,24	5,12	4,26	3,78	3,46	3,24	3,07	2,94	2,84	2,75	2,68	2,62
46	4,05	3,20	2,81	2,57	2,42	2,30	2,22	2,14	2,09	2,04	2,00	1,97
	7,21	5,10	4,24	3,76	3,44	3,22	3,05	2,92	2,82	2,73	2,66	2,60
48	4,04	3,19	2,80	2,56	2,41	2,30	2,21	2,14	2,08	2,03	1,99	1,96
	7,19	5,08	4,22	3,74	3,42	3,20	3,04	2,90	2,80	2,71	2,64	2,58
50	4,03	3,18	2,79	2,56	2,40	2,29	2,20	2,13	2,07	2,02	1,98	1,95
	7,17	5,06	4,20	3,72	3,41	3,18	3,02	2,88	2,78	2,70	2,62	2,56
55	4,02	3,17	2,78	2,54	2,38	2,27	2,18	2,11	2,05	2,00	1,97	1,93
	7,12	5,01	4,16	3,68	3,37	3,15	2,98	2,85	2,75	2,66	2,59	2,53
60	4,00	3,15	2,76	2,52	2,37	2,25	2,17	2,10	2,04	1,99	1,95	1,92
	7,08	4,98	4,13	3,65	3,34	3,12	2,95	2,82	2,72	2,63	2,56	2,50
65	3,99	3,14	2,75	2,51	2,36	2,24	2,15	2,08	2,02	1,98	1,94	1,90
	7,04	4,95	4,10	3,62	3,31	3,09	2,93	2,79	2,70	2,61	2,54	2,47
70	3,98	3,13	2,74	2,50	2,35	2,23	2,14	2,07	2,01	1,97	1,93	1,89
	7,01	4,92	4,08	3,60	3,29	3,07	2,91	2,77	2,67	2,59	2,51	2,45
80	3,96	3,11	2,72	2,48	2,33	2,21	2,12	2,05	1,99	1,95	1,91	1,89
	6,96	4,88	4,04	3,56	3,25	3,04	2,87	2,74	2,64	2,55	2,48	2,41
100	3,94	3,09	2,70	2,46	2,30	2,19	2,10	2,03	1,97	1,92	1,88	1,85
	6,90	4,82	3,98	3,51	3,20	2,99	2,82	2,69	2,59	2,51	2,43	2,36
125	3,92	3,07	2,68	2,44	2,29	2,17	2,08	2,01	1,95	1,90	1,86	1,83
	6,84	4,78	3,94	3,47	3,17	2,95	2,79	2,65	2,56	2,47	2,40	2,33
150	3,91	3,06	2,67	2,43	2,27	2,16	2,07	2,00	1,94	1,89	1,85	1,82
	6,81	4,75	3,91	3,44	3,14	2,92	2,76	2,62	2,53	2,44	2,37	2,30
200	3,89	3,04	2,65	2,41	2,26	2,14	2,05	1,98	1,92	1,87	1,83	1,80
	6,76	4,71	3,88	3,41	3,11	2,90	2,73	2,60	2,50	2,41	2,34	2,28
400	3,86	3,02	2,62	2,39	2,23	2,12	2,03	1,96	1,90	1,85	1,81	1,78
	6,70	4,66	3,83	3,36	3,06	2,85	2,69	2,55	2,46	2,37	2,29	2,23
1000	3,85	3,00	2,61	2,38	2,22	2,10	2,02	1,95	1,89	1,84	1,80	1,76
	6,66	4,62	3,80	3,34	3,04	2,82	2,66	2,53	2,43	2,34	2,26	2,20
∞	3,84	2,99	2,60	2,37	2,21	2,09	2,01	1,94	1,88	1,83	1,79	1,75
	6,64	4,60	3,78	3,32	3,02	2,80	2,64	2,51	2,41	2,32	2,24	2,18

VA suuremale s^2

14	16	20	24	30	40	50	75	100	200	500	∞	VA
1,94 2,54	1,89 2,46	1,82 2,35	1,78 2,26	1,73 2,17	1,68 2,08	1,64 2,02	1,60 1,94	1,57 1,91	1,54 1,85	1,51 1,80	1,49 1,78	42
1,92 2,52	1,88 2,44	1,81 2,32	1,76 2,24	1,72 2,15	1,66 2,06	1,63 2,00	1,58 1,92	1,56 1,88	1,52 1,82	1,50 1,78	1,48 1,75	44
1,91 2,50	1,87 2,42	1,80 2,30	1,75 2,22	1,71 2,13	1,65 2,04	1,62 1,98	1,57 1,90	1,54 1,86	1,51 1,80	1,48 1,76	1,46 1,72	46
1,90 2,48	1,86 2,40	1,79 2,28	1,74 2,20	1,70 2,11	1,64 2,02	1,61 1,96	1,56 1,88	1,53 1,84	1,50 1,78	1,47 1,73	1,45 1,70	48
1,90 2,46	1,85 2,39	1,78 2,26	1,74 2,18	1,69 2,10	1,63 2,00	1,60 1,94	1,55 1,86	1,52 1,82	1,48 1,76	1,46 1,71	1,44 1,68	50
1,88 2,43	1,83 2,35	1,76 2,23	1,72 2,15	1,67 2,06	1,61 1,96	1,58 1,90	1,52 1,82	1,50 1,78	1,46 1,71	1,43 1,66	1,41 1,64	55
1,86 2,40	1,81 2,32	1,75 2,20	1,70 2,12	1,65 2,03	1,59 1,93	1,56 1,87	1,50 1,79	1,48 1,74	1,44 1,68	1,41 1,63	1,39 1,60	60
1,85 2,37	1,80 2,30	1,73 2,18	1,68 2,09	1,63 2,00	1,57 1,90	1,54 1,84	1,49 1,76	1,46 1,71	1,42 1,64	1,39 1,60	1,37 1,56	65
1,84 2,35	1,79 2,28	1,72 2,15	1,67 2,07	1,62 1,98	1,56 1,88	1,53 1,82	1,47 1,74	1,45 1,69	1,40 1,62	1,37 1,56	1,35 1,52	70
1,82 2,32	1,77 2,24	1,70 2,11	1,65 2,03	1,60 1,94	1,54 1,84	1,51 1,78	1,45 1,70	1,42 1,65	1,38 1,57	1,35 1,52	1,32 1,49	80
1,79 2,26	1,75 2,19	1,68 2,06	1,63 1,98	1,57 1,89	1,51 1,79	1,48 1,73	1,42 1,64	1,39 1,59	1,34 1,51	1,30 1,46	1,28 1,43	100
1,77 2,23	1,72 2,15	1,65 2,03	1,60 1,94	1,55 1,85	1,49 1,75	1,45 1,68	1,39 1,59	1,36 1,54	1,31 1,46	1,27 1,40	1,25 1,37	125
1,76 2,20	1,71 2,12	1,64 2,00	1,59 1,91	1,54 1,83	1,47 1,72	1,44 1,66	1,37 1,56	1,34 1,51	1,29 1,43	1,25 1,37	1,22 1,33	150
1,74 2,17	1,69 2,09	1,62 1,97	1,57 1,88	1,52 1,79	1,45 1,69	1,42 1,62	1,35 1,53	1,32 1,48	1,26 1,39	1,22 1,33	1,19 1,28	200
1,72 2,12	1,67 2,04	1,60 1,92	1,54 1,84	1,49 1,74	1,42 1,64	1,38 1,57	1,32 1,47	1,28 1,42	1,22 1,32	1,16 1,24	1,13 1,19	400
1,70 2,09	1,65 2,01	1,58 1,89	1,53 1,81	1,47 1,71	1,41 1,61	1,36 1,54	1,30 1,44	1,26 1,38	1,19 1,28	1,13 1,19	1,08 1,11	1000
1,69 2,07	1,64 1,99	1,57 1,87	1,52 1,79	1,46 1,69	1,40 1,59	1,35 1,52	1,28 1,41	1,24 1,36	1,17 1,25	1,11 1,15	1,00 1,09	∞

16. P VÄÄRTUSED %-DES

t	VA (vabadusaste)							
	1	2	3	4	5	6	7	8
0,1	93,7	93,0	92,7	92,5	92,5	92,0	92,0	92,0
0,2	87,4	86,0	85,5	85,1	84,9	84,7	84,1	84,1
0,3	81,5	79,3	78,5	77,9	77,7	77,3	77,2	77,1
0,4	75,8	72,7	71,6	71,1	70,8	70,6	70,4	70,2
0,5	70,5	66,7	65,0	64,4	64,0	63,6	63,4	63,2
0,6	65,6	61,0	59,2	58,2	57,5	57,0	56,8	56,6
0,7	61,2	55,7	53,5	52,4	51,5	50,9	50,6	50,4
0,8	57,2	50,7	48,2	47,0	46,0	45,3	44,9	44,6
0,9	53,5	46,3	43,5	41,9	40,9	40,3	39,9	39,6
1,0	50,0	42,2	39,2	37,5	36,2	35,5	35,0	34,7
1,1	46,8	38,6	35,2	33,4	32,0	31,3	30,8	30,3
1,2	44,0	35,3	31,7	29,7	28,3	27,7	27,0	26,4
1,3	41,5	32,2	28,4	26,3	25,0	24,2	23,5	23,0
1,4	39,3	29,6	25,7	23,3	22,0	21,1	20,4	19,9
1,5	37,3	27,2	23,1	20,7	19,3	18,5	17,8	17,1
1,6	35,5	25,0	20,8	18,5	17,0	16,0	15,3	14,8
1,7	33,9	23,1	18,8	16,4	15,0	14,0	13,2	12,8
1,8	32,3	21,3	17,0	14,7	13,2	12,2	11,5	10,9
1,9	30,8	19,8	15,4	13,0	11,6	10,7	9,9	9,3
2,0	29,6	18,4	13,9	11,6	10,2	9,3	8,5	8,0
2,1	28,3	17,1	12,7	10,4	9,0	8,0	7,4	6,9
2,2	27,2	15,9	11,5	9,3	8,0	7,0	6,4	6,0
2,3	26,1	14,8	10,5	8,3	7,0	6,1	5,5	5,1
2,4	25,1	13,8	9,6	7,4	6,2	5,3	4,7	4,3
2,5	24,2	13,0	8,8	6,7	5,4	4,6	4,1	3,7
2,6	23,4	12,1	8,0	6,0	4,8	4,1	3,5	3,2
2,7	22,7	11,4	7,4	5,4	4,3	3,6	3,1	2,7
2,8	21,9	10,7	6,8	4,9	3,8	3,1	2,6	2,3
2,9	21,2	10,1	6,3	4,4	3,4	2,7	2,3	2,0
3,0	20,5	9,7	5,8	4,0	3,0	2,4	2,0	1,7
3,1	19,9	9,1	5,4	3,6	2,7	2,12	1,7	1,45
3,2	19,3	8,6	5,0	3,3	2,4	1,86	1,5	1,25
3,3	18,8	8,1	4,6	3,1	2,2	1,65	1,3	1,08
3,4	18,3	7,7	4,3	2,75	2,0	1,45	1,13	0,95
3,5	17,7	7,3	4,0	2,50	1,8	1,28	1,00	0,80
3,6	17,3	6,9	3,7	2,30	1,6	1,13	0,87	0,70
3,7	16,8	6,6	3,4	2,10	1,4	1,01	0,77	0,61
3,8	16,4	6,3	3,2	1,92	1,27	0,90	0,68	0,53
3,9	16,0	6,0	3,0	1,75	1,15	0,79	0,60	0,46
4,0	15,6	5,7	2,8	1,62	1,05	0,71	0,52	0,39

VA (vabadusaste)								t
9	10	12	15	20	30	50	∞	
92,0	92,0	92,0	92,0	92,0	92,0	92,0	92,0	0,1
84,1	84,1	84,1	84,1	84,1	84,1	84,1	84,1	0,2
77,0	76,9	76,8	76,7	76,6	76,5	76,4	76,3	0,3
70,0	69,8	69,6	69,4	69,2	69,0	68,9	68,8	0,4
63,0	62,8	62,6	62,4	62,2	62,0	61,9	61,8	0,5
56,4	56,2	56,0	55,8	55,6	55,4	55,2	55,0	0,6
50,2	50,0	49,6	49,3	49,0	48,7	48,5	48,3	0,7
44,3	44,1	43,7	43,4	43,1	42,8	42,6	42,4	0,8
39,3	39,0	38,6	38,2	37,8	37,4	37,1	36,8	0,9
34,4	34,1	33,6	33,3	33,0	32,4	31,9	31,7	1,0
29,9	29,7	29,1	28,8	28,5	27,9	27,5	27,1	1,1
25,9	25,8	25,1	24,8	24,5	23,9	23,4	23,0	1,2
22,6	22,2	21,7	21,3	21,0	20,4	19,8	19,3	1,3
19,5	19,1	18,5	18,1	17,7	17,1	16,5	16,0	1,4
16,7	16,3	15,7	15,3	14,9	14,3	13,7	13,2	1,5
14,4	14,0	13,4	12,9	12,5	11,9	11,4	11,0	1,6
12,4	12,0	11,4	10,9	10,4	9,8	9,3	8,9	1,7
10,5	10,2	9,5	9,1	8,7	8,1	7,6	7,2	1,8
9,0	8,7	8,0	7,6	7,2	6,6	6,1	5,7	1,9
7,7	7,3	6,8	6,4	6,0	5,4	4,9	4,5	2,0
6,6	6,3	5,8	5,3	4,9	4,4	4,0	3,6	2,1
5,6	5,3	4,8	4,4	4,0	3,6	3,2	2,8	2,2
4,7	4,4	4,1	3,6	3,2	2,9	2,5	2,1	2,3
4,0	3,7	3,4	3,0	2,6	2,3	2,0	1,6	2,4
3,4	3,1	2,8	2,5	2,1	1,8	1,6	1,2	2,5
2,9	2,7	2,4	2,0	1,7	1,4	1,23	0,93	2,6
2,5	2,3	2,0	1,7	1,4	1,1	0,98	0,70	2,7
2,1	1,9	1,6	1,4	1,1	0,90	0,74	0,52	2,8
1,8	1,6	1,3	1,1	0,89	0,70	0,57	0,38	2,9
1,5	1,33	1,1	0,91	0,71	0,55	0,43	0,27	3,0
1,25	1,12	0,93	0,75	0,57	0,43	0,33	0,20	3,1
1,08	0,97	0,78	0,60	0,45	0,33	0,25	0,14	3,2
0,93	0,82	0,65	0,50	0,36	0,26	0,18	0,10	3,3
0,79	0,70	0,53	0,40	0,28	0,20	0,14	< 0,10	3,4
0,69	0,58	0,44	0,32	0,22	0,15	0,10		3,5
0,59	0,50	0,37	0,26	0,18	0,12	< 0,10		3,6
0,50	0,43	0,30	0,21	0,15	< 0,10			3,7
0,43	0,36	0,26	0,17	0,12				3,8
0,37	0,30	0,21	0,14	< 0,10				3,9
0,31	0,26	0,18	0,12					4,0

t	VA (vabadusaste)											
	1	2	3	4	5	6	7	8	9	10	12	15
4,0	15,6	5,7	2,8	1,62	1,05	0,71	0,52	0,39	0,31	0,26	0,18	0,12
4,2	14,8	5,2	2,45	1,35	0,84	0,57	0,40	0,29	0,23	0,18	0,13	<0,10
4,4	14,2	4,8	2,15	1,15	0,70	0,45	0,31	0,22	0,17	0,14	<0,10	
4,6	13,6	4,4	1,91	1,00	0,59	0,36	0,24	0,17	0,13	0,11		
4,8	13,0	4,1	1,70	0,86	0,49	0,29	0,19	0,13	<0,10	<0,10		
5,0	12,6	3,8	1,52	0,75	0,42	0,24	0,15	0,11				
5,2	12,1	3,5	1,37	0,66	0,34	0,20	0,12	<0,10				
5,4	11,7	3,25	1,23	0,58	0,29	0,17	0,10					
5,6	11,3	3,05	1,11	0,50	0,25	0,14	<0,10					
5,8	10,9	2,85	1,01	0,44	0,21	0,12						
6,0	10,5	2,65	0,92	0,39	0,18	0,10						
6,2	10,2	2,50	0,84	0,35	0,16	<0,10						
6,4	9,9	2,35	0,78	0,31	0,14							
6,6	9,7	2,22	0,72	0,27	0,12							
6,8	9,3	2,10	0,66	0,24	0,11							
7,0	9,0	1,99	0,61	0,22	<0,10							
7,2	8,8	1,87	0,56	0,20								
7,4	8,6	1,78	0,52	0,18								
7,6	8,3	1,69	0,48	0,16								
7,8	8,1	1,60	0,44	0,14								
8,0	7,9	1,52	0,41	0,13								
8,5	7,5	1,34	0,34	0,11								
9,0	7,0	1,19	0,29	<0,10								
9,5	6,7	1,08	0,25									
10,0	6,3	0,98	0,22									
11,0	5,75	0,82	0,16									
12,0	5,30	0,69	0,12									
13,0	4,90	0,58	0,10									
14,0	4,55	0,50	<0,10									
15,0	4,25	0,44										
16,0	4,00	0,39										
17,0	3,75	0,34										
18,0	3,55	0,31										
19,0	3,35	0,27										
20,0	3,20	0,24										
21,0	3,05	0,22										
22,0	2,90	0,20										
23,0	2,78	0,19										
24,0	2,65	0,17										
25,0	2,55	0,16										
26,0	2,43	0,15										
27,0	2,36	0,14										
28,0	2,28	0,13										
29,0	2,20	0,12										
30,0	2,13	0,11										
31,0	2,06	0,10										

17. t VÄÄRTUSED (STUDENTI KRITEERIUM) $p = 5\%$, 1% ja $0,1\%$

PUHUL

VA	p=5%	p=1%	p=0,1%	VA	p=5%	p=1%	p=0,1%
1	12,706	63,657	636,619	26	2,056	2,779	3,707
2	4,303	9,925	31,598	27	2,052	2,771	3,690
3	3,182	5,841	12,941	28	2,048	2,763	3,674
4	2,776	4,604	8,610	29	2,045	2,756	3,659
5	2,571	4,032	6,859	30	2,042	2,750	3,646
6	2,447	3,707	5,959	35	2,030	2,724	3,592
7	2,365	3,499	5,405	40	2,021	2,704	3,551
8	2,306	3,355	5,041	45	2,014	2,689	3,521
9	2,262	3,250	4,781	50	2,008	2,678	3,496
10	2,228	3,169	4,587	60	2,000	2,660	3,460
11	2,201	3,106	4,437	70	1,994	2,648	3,435
12	2,179	3,055	4,318	80	1,990	2,638	3,416
13	2,160	3,012	4,221	90	1,987	2,631	3,402
14	2,145	2,977	4,140	100	1,984	2,626	3,390
15	2,131	2,947	4,073	120	1,980	2,617	3,373
16	2,120	2,921	4,015	140	1,977	2,611	3,361
17	2,110	2,898	3,965	160	1,975	2,607	3,352
18	2,101	2,878	3,922	180	1,973	2,603	3,346
19	2,093	2,861	3,883	200	1,972	2,601	3,340
20	2,086	2,845	3,850	300	1,968	2,592	3,324
21	2,080	2,831	3,819	400	1,966	2,588	3,315
22	2,074	2,819	3,792	500	1,965	2,586	3,310
23	2,069	2,807	3,767	1000	1,962	2,581	3,300
24	2,064	2,797	3,745	∞	1,960	2,576	3,291
25	2,060	2,787	3,725				

V. KATSEANDMETE ARVUTAMIS - SKEEM

Käesolevas töös esitame ainult kaks katseandmete arvutamisskeemi. Arvutamisskeemid on lihtsad, ilma selgitusteta ja peavad võimaldama arvutusi teha ka neil, kes antud arvutamisskeemi kõiki printsiipe ei tunne. Arvutamiseks võetakse korrigeeritud lapiisaagid.

1. BLOKK-KATSETE ARVUTAMISSKEEM

Saagid kg/L (süsteematiseeritud korduste ja variantide kaupa)

Var. nr.	a	b	c	...	b*	V
1	x	x	x	...	x	...
2	x	x	x	...	x	...
3	x	x	x	...	x	...
.
.
.
v*	x	x	x	...	x	...
B*	...	...	...	...	...	... = Sx

*Variandi või korduse viimane liige.

Hälvete ruutude summade (SQ) arvutamine:

Kogu SQ

$$Sx^2 = x_1^2 + x_2^2 + \dots + x_n^2 = \dots \quad SQ_k = Sx^2 - \bar{x}Sx$$

$$Sx = x_1 + x_2 + \dots + x_n = \dots \quad SQ_k = \dots$$

$$\bar{x} = \frac{Sx}{N} = \dots$$

$$\bar{x} Sx = \dots$$

Bloki SQ

$$SB^2 = B_a^2 + B_b^2 + \dots + B_b^2 = \dots \quad SQ_b = \frac{SB^2}{v} - \bar{x}Sx$$

$$\frac{SB^2}{v} = \dots \quad SQ_b = \dots$$

Variandi SQ

$$SV^2 = V_1^2 + V_2^2 + \dots + V_v^2 = \dots \quad SQ_v = \frac{SV^2}{b} - \bar{x}Sx$$

$$\frac{SV^2}{b} = \dots \quad SQ_v = \dots$$

Jäägi SQ

$$SQ_j = SQ_k - (SQ_b + SQ_v) = \dots$$

Dispersioontabel

Dispersioon	SQ	VA	s ²	F _{emp.}	F _{tab.}
Kogu			
Bloki			
Variandi
Jäägi

$$VA_k = N - 1$$

$$s_v^2 = SQ_v : VA_v$$

$$VA_b = b - 1$$

$$s_j^2 = SQ_j : VA_j$$

$$VA_v = v - 1$$

$$F_{emp.} = s_v^2 : s_j^2$$

$$VA_j = VA_k - (VA_b + VA_v)$$

Diferentsi standardhälve I

$$s_{\bar{d}}^I = \sqrt{\frac{2 \cdot s_j^2}{n}} = \sqrt{\dots} = \dots$$

Piirdiferents I

$$PD I_{5,0\%} = s_{\bar{d}} \cdot t_{5,0\%} = \dots$$

$$PD I_{1,0\%} = s_{\bar{d}} \cdot t_{1,0\%} = \dots$$

$$PD I_{0,1\%} = s_{\bar{d}} \cdot t_{0,1\%} = \dots$$

Diferentsi standardhälve II

$$s_{\bar{d}}^{II} = \sqrt{\frac{s_j^2}{n} \cdot \frac{v-1}{v}} = \sqrt{\dots} = \dots$$

Piirdiferents II

$$PD II_{5,0\%} = s_{\bar{d}} \cdot t_{5,0\%} = \dots$$

$$PD II_{1,0\%} = s_{\bar{d}} \cdot t_{1,0\%} = \dots$$

$$PD II_{0,1\%} = s_{\bar{d}} \cdot t_{0,1\%} = \dots$$

Lõpptabel

Var. nr.	Variant	Saak		Rel.	Usutavus	Rel.	Usutavus
		kg/L	ts/ha				
1	100,0		...	
2	
3	
.	
.	
v	
S	—	-		-	
\bar{x}	—	-		100,0	
PD I _{5,0%}			-	
PD I _{1,0%}			-	
PD I _{0,1%}			-	
PD II _{5,0%}		-		...	
PD II _{1,0%}		-		...	
PD II _{0,1%}		-		...	

$$PD \text{ suhteline } (PD_{rel.}) : \frac{t \cdot s_{\bar{d}} \cdot 100}{\bar{x}^*}$$

* \bar{x} on standardsordi aritmeetiline keskmine - (PD_{rel.}I) või kõikide sortide aritmeetiline keskmine (PD_{rel.}II).

Märkus: $s_{\bar{d}}$ I ja PD I kasutatakse variantide võrdlemiseks kontrollvariandiga, $s_{\bar{d}}$ II ja PD II aga variantide võrdlemiseks variantide keskmisega (\emptyset kõik variandid).

2. LADINA RUUDU ARVUTAMISSKEEM

Saagid kg/L (süsteematiseeritud korduste ja variantide kaupa)

	a	b	c	...	b	V
1	x	x	x	...	x	...
2	x	x	x	...	x	...
3	x	x	x	...	x	...
.
.
v*	x	x	x	...	.	...
B	...	...	...	...	...	...= Sx
L	...	...	...	...	...	...= Sx

(L leitakse asetusplaani järgi.)

Hälvete ruutude summade (SQ) arvutamine:

SQ_k , SQ_b ja SQ_v arvutatakse nagu blokk-katsete juures.

Tulba SQ

$$SL^2 = L_I^2 + L_{II}^2 + \dots L_1^2 = \dots$$

$$SQ_1 = \frac{SL^2}{v} - \bar{x}Sx$$

$$\frac{SL^2}{v} = \dots = \dots$$

$$SQ_1 = \dots$$

Jäägi SQ

$$SQ_j = SQ_k - (SQ_b + SQ_v + SQ_1).$$

Tulba vabadusaste arvutatakse:

$$VA_1 = 1 - 1.$$

* Variandi või korduse viimane liige.

Dispersioontabel

Dispersioon	SQ	VA	s^2	$F_{emp.}$	$F_{tab.}$
Kogu			
Bloki			
Tulba			
Variandi
Jäägi

s^2 , $F_{emp.}$, $F_{tab.}$, $s_{\bar{d}}^2$ I, $s_{\bar{d}}^2$ II, PD I ja PD II arvutatakse nagu blokk-katse juures. Lõpptabel on samuti analoogiline.

VI. KASUTATUD KIRJANDUS

- R ü t h e r, H., Die Feldversuchstechnik, Berlin 1958.
- V ß r k, H. R., Mõõtühikud ja tähised, Tallinn 1961.
- Z i m m e r m a n n, K. F., Technik des Versuchswesens und der Pflanzenzüchtung, Leipzig 1955.
- Z i m m e r m a n n, K. F., Tabellen, Formeln und Fachausdrücke zur Variationsstatistik, Berlin 1959.
- Z i m m e r m a n n, K. F., Praktische Pflanzenzüchtung, Jena 1961.
- Z ö l l e r, W., Formeln und Tabellen zur Errechnung des mittleren Fehlers, Berlin 1925.
- А н д р о с и к, А. С. и Ш м а л ь к о, В. С., Лабораторный практикум по технологии сельскохозяйственных продуктов, Москва 1964.
- Г о р и н, А. П., У к о л о в, А. А. и др., Руководство к практическим занятиям по селекции и семеноводству зерновых культур, Москва 1957.
- П о п о в а, Г. М., Л е о н т ь е в, В. М. и др., Руководство к практическим занятиям по селекции и семеноводству полевых культур, Москва-Ленинград 1955.
- П о п о в а, Г. М., Л е о н т ь е в, В. М. и др., Руководство к практическим занятиям по селекции и семеноводству полевых культур. Издание 2-е, переработанное. Москва-Ленинград 1960.
- У р б а х, В. Ю., Математическая статистика для биологов и медиков, Москва 1963.
- С н е д е к о р, Дж. У., Статистические методы в применении к исследованиям в сельском хозяйстве и биологии, Москва 1961.

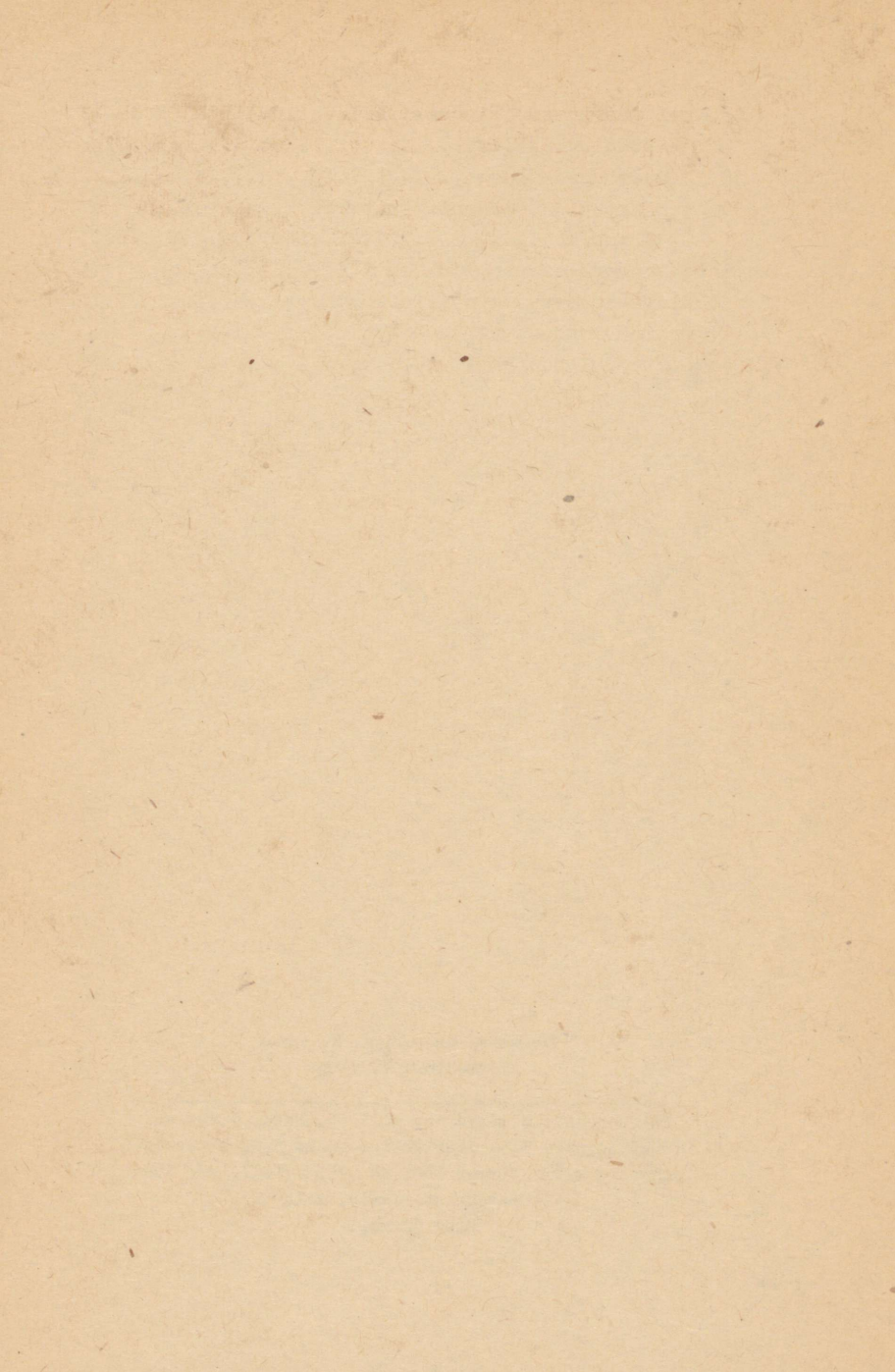
Ф и н н и, Д. Д., Применение статистики в опытном деле, Москва 1957.

Ю р ь е в, В. Я., Общая селекция и семеноводство полевых культур, Москва 1958.

S i s u k o r d

Eessõna	3
I. Sümbolid ja lühendid	4
II. Valimik tähtsamaid valemeid	7
III. Tabelite kasutamise juhend	10
IV. Arvutamise abitabelid	13
1. Tabel kasvuaja pikkuse arvutamiseks	13
2. Taimede arv hektaril	14
3. Tuhande seemne kaalude tabel	16
4. Tabel tärglisesisalduse määramiseks kartuli- mugulais erikaalu järgi	24
5. Parandus kuivaine- ja tärglisesisaldusele vee temperatuuri erinevuse arvel	25
6. Kuivaine määramine rakumahlas refraktomeetriga 20°C juures	26
7. Rahvusvaheline temperatuurikorrektsooni tabel	29
8. Koefitsiendid erineva kuivainesisaldusega seem- nete kaalu ümberarvutamiseks 86%-lisele kuivai- nele	30
9. Koefitsiendid erineva kuivainesisaldusega seem- nete kaalu ümberarvutamiseks 88%-lisele kuivai- nele	31
10. Koefitsiendid erineva niiskusega seemnete kaalu ümberarvutamiseks 14%-lisele niiskusesisalduse- le	32
11. Arvude 1 kuni 999 ruudud	34
12. Arvude 1 kuni 2499 ruutjuured	38
13. Arvude 1 kuni 2499 pöördväärtused	45
14. Tabelid aritmeetilise keskmise standardhälbe ($s_{\bar{x}}$) leidmiseks	52

15. F-i väärtused (Fischeri kriteerium) $p = 5\%$ ja 1% puhul	68
16. P väärtused %-des	74
17. t väärtused (Studenti kriteerium) $p = 5\%$, 1% ja 0,1% puhul	77
V. Katseandmete arvutamisskeem	78
1. Blokk-katsete arvutamisskeem	78
2. Ladina ruudu arvutamisskeem	81
VI. Kasutatud kirjandus	83



Vastutav toimetaja: K. Annuk
Korrektor: V. Kingo

Paljundamiseks antud 10. VIII 65. Paber 60x84 cm.
Trükipoognaid 5,5. Tingtrükipoognaid 5,0. Arvestus-
poognaid 4,77. Tiraaž 800. MB 07601. Tell. nr. 106.

EPA rotaprint, Tartu, Riia 12

Hind 12 kop.

A-2702

Hind 12 kop.

TÜ RAAMATUKOGU



1 0300 00427889 3