

**FEDERAL RESERVE BANK
OF NEW YORK**

Fiscal Agent of the United States

[Circular No. 2453]
June 26, 1942]

TREASURY BILLS

*To all Incorporated Banks and Trust Companies in the
Second Federal Reserve District and Others Concerned:*

In this bank's circular No. 2430, dated May 8, 1942, reference was made to an increase in the weekly offering of Treasury bills which the Secretary of the Treasury had announced would begin with the issue dated May 13, 1942. The belief was then expressed that the larger weekly offerings of bills would provide a convenient opportunity for employment of funds upon which banks and others might wish to obtain some income without real sacrifice of liquidity. It was also pointed out in the circular that the attractiveness of the Treasury bill, as a short-term investment, had been increased by the rise in yields which had taken place in the previous six months, and by the enhanced liquidity of these securities now assured by the undertaking of the Federal Reserve Banks to purchase all bills offered to them on a discount basis at the rate of $\frac{3}{8}$ percent per annum.

The first increase in the weekly offering of Treasury bills was from \$150,000,000 to \$250,000,000. On June 5, 1942 the Secretary of the Treasury announced that beginning with the issue dated June 10, 1942 weekly bill offerings would be further increased by \$50,000,000 to \$300,000,000. The increased availability of bills arising out of the larger offerings and the assurance of a market at a fixed price has already given greater breadth to the Treasury bill market. Tenders for new issues of Treasury bills have been received in increasing numbers from outside of the principal money centers, where these bills find their principal market, and many inquiries have been received, from banks and others, as to the correct procedure to follow in bidding for Treasury bills. In view of these inquiries and in the interest of a further broadening of the market, the procedure used in submitting tenders for new issues of Treasury bills and other pertinent data are outlined on the following pages.

ALLAN SPROUL,
President.

INFORMATION REGARDING TREASURY BILLS

The Treasury bill is a bearer obligation of the United States issued on a discount basis. Maturities of new issues of Treasury bills have varied in the past, but in late years the usual maturity has been 91 days. The income on Treasury bills represents the difference between the purchase price and the sale price or maturity value. The income, whether interest or gain from the sale or other disposition of the bill, is subject to Federal taxation, but is exempt from State and local taxes.

Treasury bills are freely traded in the open market, and new issues when offered may be obtained direct from the Treasury by tender through the Federal Reserve Banks. The Secretary of the Treasury follows the practice of inviting competitive tenders, each week, for a specified amount of Treasury bills of stipulated maturity to be issued on a discount basis. Public announcement of offerings of Treasury bills is usually made on Friday. Tenders are received up to 2 p.m., Eastern war time, on the following Monday, and bills are usually dated and issued on Wednesday. In the case of qualified depositories, the Secretary of the Treasury from time to time in his discretion allows payment to be made by credit in the War Loan Deposit Account. Instructions with respect to the procedure to be followed in submitting tenders are given in Treasury Department Circular No. 418*, as amended, and in the circulars of this bank which contain public notice of Treasury bill offerings. The circulars are mailed to all incorporated banks and trust companies in the Second Federal Reserve District and to other interested investors.

On the reverse side of these offering circulars there is provided a special form for use in submitting tenders for Treasury bills. Tenders must be made for an amount that is an even multiple of \$1000, on a maturity value basis, and the price or prices submitted by the bidder for the amount or amounts desired (at maturity values) must be stated and expressed on the basis of 100, and to the third decimal place only. For example, a bank wishing to bid for 91-day Treasury bills dated July 1, 1942 and maturing September 30, 1942 (current issue) should fill out a tender form and forward it to reach this bank not later than 2 p.m., on Monday, June 29, 1942. If it were desired to bid a price of, say, 99.909 for \$100,000 maturity value, the price of 99.909 would be inserted in the blank space after the word "pay" on the tender form and \$100,000 in the space after "amount of" so that the tender form would read as follows:

"Pursuant to the provisions of Treasury Department Circular No. 418, as amended, and to the provisions of the public notice on June 26, 1942, as issued by the Secretary of the Treasury, the undersigned offers to pay 99.909 for a total amount of \$ 100,000 (maturity value) of the Treasury bills therein described, or for any less amount that may be awarded, payment therefor to be made at your bank in cash or other immediately available funds on the date stated in the public notice."

In cases where bidders prefer to wait until the last day on which tenders are received (usually Monday), and distance prevents delivery to a Federal Reserve Bank or Branch by hand, the bid or bids should be tendered, through a bank, by telegram. Tenders submitted by incorporated banks and trust companies by telegram should be confirmed immediately by mail, on tender forms, and both the telegrams and tender forms should indicate whether the tenders are for account of the bank or for account of its customers.

A bidder who submits bids at more than one price is required to execute a separate tender at each price. Tenders may be submitted without deposit by incorporated banks and trust companies and by responsible and recognized dealers in investment securities. In the absence of an express

* Additional copies may be obtained from Federal Reserve Bank of New York upon request.

guaranty of payment by an incorporated bank or trust company, tenders by others must be accompanied by deposit of 10 percent of the face amount of the Treasury bills for which tenders are submitted.

Upon expiration of the time set for placing bids, all tenders received at each Federal Reserve Bank are opened and the details communicated by wire to the Secretary of the Treasury. Starting with the highest price, the Secretary awards bids in full until the Treasury has obtained the approximate amount of funds stated in the offering circular. Where two or more bids are made at the same price and only a part of the tenders at such price can be accepted, the amount accepted is prorated in accordance with the respective amounts bid for.

The Secretary of the Treasury makes a public announcement of the results of each weekly sale of Treasury bills which generally appears in the newspapers on the morning following the closing of bidding. The Reserve Banks, at the same time and on instructions from the Secretary of the Treasury, advise those who have submitted tenders of the acceptance or rejection of their bids. Attached to the advice sent to successful bidders is a form to be filled out by them indicating the denominations in which the bills are to be issued, the disposition to be made of the bills, and the method of payment.

Notwithstanding the fact that competitive bidding for Treasury bills is conducted on a price basis, these securities are quoted in the market on a discount basis. A rate of discount equivalent to a given price may be calculated as follows:

1. Subtract the price from face value (i.e. maturity value) to obtain the amount of the discount.
2. Divide the amount of discount by the actual number of days to maturity of the bill to obtain the amount of discount per day.
3. Multiply the amount of discount per day by 360 (the number of days in a commercial year of 12 months of 30 days each) to obtain the amount of discount per year.
4. Divide the amount of discount per year by face value to obtain the rate of discount.

For example, if Treasury bills maturing September 30, 1942 were purchased July 1, 1942 (91 actual days to maturity) at a price of 99.909 per \$100, the annual rate of discount could be determined by the following calculation:

FORMULA:

Face value less purchase price divided by actual number of days to maturity multiplied by number of days in a commercial year divided by face value equals annual rate of discount.

EXAMPLE:

$$\frac{100.000 - 99.909}{91} \times 360 \div 100 = .0036 \text{ or } 36/100 \text{ of } 1\%$$

Conversely, if it is desired to ascertain the price of a Treasury bill purchased at a specified rate of discount, the following method may be used:

1. Multiply the annual rate of discount by face value in order to obtain the amount of the annual discount.
2. Divide the amount of the discount by 360 (the number of days in a commercial year of 12 months of 30 days each) to obtain the amount of discount per day.
3. Multiply the discount per day by the actual number of days to maturity of the bill to obtain the amount of discount for the remaining life of the bill.
4. Deduct the amount of discount for the remaining life of the bill from the face value of the bill to arrive at the purchase price.

For example, if the same Treasury bills referred to in the preceding example were purchased on the same date at a rate of 0.36% discount, the price could be determined as follows:

FORMULA:

Rate of discount multiplied by face value divided by number of days in a commercial year multiplied by the actual number of days to maturity equals amount of discount for the remaining life of bill.

Face value less amount of discount for the remaining life of bill equals purchase price.

EXAMPLE:

$$\frac{.0036 \times 100}{360} \times 91 = .091$$

Face value.....	100.000
Less	<u>.091</u>
Purchase Price.....	<u>99.909</u>

For the convenience of investors in determining equivalent prices and rates of discount for specified time periods, the table on the following pages has been prepared showing the cost of or proceeds from United States Treasury bills per \$100 at rates of discount ranging from 0.25% to 0.50%. The table may be used in calculating tenders for any amount of new offerings of Treasury bills since bid prices must be expressed only to the third decimal place. It should also prove useful to investors who buy and sell Treasury bills in the market, although the decimals have not been extended sufficiently to give accurate market prices, to the last cent, on amounts in excess of \$1,000,000. The utility of the table may be illustrated by the example of an investor wishing to obtain, by tender, new 91-day Treasury bills at a discount of 0.36%. Since a bidder must make his tender on a price basis, he could immediately arrive at the appropriate price by finding 91 in the column headed "days to run" and then taking the figure corresponding to 91 days in the column headed "0.36%". Thus, the price equivalent to a rate of discount of 0.36% for a 91-day bill would be 99.909.

DISCOUNT RATE AND PRICE PER \$100

Days to Run	0.25 %	0.26 %	0.27 %	0.28 %	0.29 %	0.30 %	0.31 %	0.32 %	0.33 %	0.34 %	0.35 %	0.36 %	0.37 %	0.375 %
1	99.999306	99.999278	99.999250	99.999222	99.999194	99.999167	99.999139	99.999111	99.999083	99.999056	99.999028	99.999000	99.998972	99.998958
2	99.998611	99.998556	99.998500	99.998444	99.998389	99.998333	99.998278	99.998222	99.998167	99.998111	99.998056	99.998000	99.997944	99.997917
3	99.997917	99.997833	99.997750	99.997667	99.997583	99.997500	99.997417	99.997333	99.997250	99.997167	99.997083	99.997000	99.996917	99.996875
4	99.997222	99.997111	99.997000	99.996889	99.996778	99.996667	99.996556	99.996444	99.996333	99.996222	99.996111	99.996000	99.995889	99.995833
5	99.996528	99.996389	99.996250	99.996111	99.995972	99.995833	99.995694	99.995556	99.995417	99.995278	99.995139	99.995000	99.994861	99.994792
6	99.995833	99.995667	99.995500	99.995333	99.995167	99.995000	99.994833	99.994667	99.994500	99.994333	99.994167	99.994000	99.993833	99.993750
7	99.995139	99.994944	99.994750	99.994556	99.994367	99.994167	99.993972	99.993778	99.993583	99.993389	99.993194	99.993000	99.992806	99.992708
8	99.994444	99.994222	99.994000	99.993778	99.993556	99.993333	99.993111	99.992889	99.992667	99.992444	99.992222	99.992000	99.991778	99.991667
9	99.993750	99.993500	99.993250	99.993000	99.992750	99.992500	99.992250	99.992000	99.991750	99.991500	99.991250	99.991000	99.990750	99.990625
10	99.993056	99.992778	99.992500	99.992222	99.991944	99.991667	99.991389	99.991111	99.990833	99.990556	99.990278	99.990000	99.989722	99.989583
11	99.992361	99.992056	99.991750	99.991444	99.991139	99.990833	99.990528	99.990222	99.989917	99.989611	99.989306	99.989000	99.988694	99.988542
12	99.991667	99.991333	99.991000	99.990667	99.990333	99.990000	99.989667	99.989333	99.989000	99.988667	99.988333	99.988000	99.987667	99.987500
13	99.990972	99.990611	99.990250	99.989889	99.989528	99.989167	99.988806	99.988444	99.988083	99.987722	99.987361	99.987000	99.986639	99.986458
14	99.990278	99.989889	99.989500	99.989111	99.988722	99.988333	99.987944	99.987556	99.987167	99.986778	99.986389	99.986000	99.985611	99.985417
15	99.989583	99.989167	99.988750	99.988333	99.987917	99.987500	99.987083	99.986667	99.986250	99.985833	99.985417	99.985000	99.984583	99.984375
16	99.988889	99.988444	99.988000	99.987556	99.987111	99.986667	99.986222	99.985778	99.985333	99.984889	99.984444	99.984000	99.983556	99.983333
17	99.988194	99.987722	99.987250	99.986778	99.986306	99.985833	99.985361	99.984889	99.984417	99.983944	99.983472	99.983000	99.982528	99.982292
18	99.987500	99.987000	99.986500	99.986000	99.985500	99.985000	99.984500	99.984000	99.983500	99.983000	99.982500	99.982000	99.981500	99.981250
19	99.986806	99.986278	99.985750	99.985222	99.984694	99.984167	99.983639	99.983111	99.982583	99.982056	99.981528	99.981000	99.980472	99.980208
20	99.986111	99.985556	99.985000	99.984444	99.983889	99.983333	99.982778	99.982222	99.981667	99.981111	99.980556	99.980000	99.979444	99.979167
21	99.985417	99.984833	99.984250	99.983667	99.983083	99.982500	99.981917	99.981333	99.980750	99.980167	99.979583	99.979000	99.978417	99.978125
22	99.984722	99.984111	99.983500	99.982889	99.982278	99.981667	99.981056	99.980444	99.979833	99.979222	99.978611	99.978000	99.977389	99.977083
23	99.984028	99.983389	99.982750	99.982111	99.981472	99.980833	99.980194	99.979556	99.978917	99.978278	99.977639	99.977000	99.976361	99.976042
24	99.983333	99.982667	99.982000	99.981333	99.980667	99.979989	99.979333	99.978667	99.978000	99.977333	99.976667	99.976000	99.975333	99.975000
25	99.982639	99.981944	99.981250	99.980556	99.979861	99.979167	99.978472	99.977778	99.977083	99.976389	99.975694	99.975000	99.974306	99.973958
26	99.981944	99.981222	99.980500	99.979778	99.979056	99.978333	99.977611	99.976889	99.976167	99.975444	99.974722	99.974000	99.973278	99.972917
27	99.981250	99.980500	99.979750	99.979000	99.978250	99.977500	99.976750	99.976000	99.975250	99.974500	99.973750	99.973000	99.972250	99.971875
28	99.980556	99.979778	99.979000	99.978222	99.977444	99.976667	99.975889	99.975111	99.974333	99.973556	99.972778	99.972000	99.971222	99.970833
29	99.979861	99.979056	99.978250	99.977444	99.976639	99.975833	99.975028	99.974222	99.973417	99.972611	99.971806	99.971000	99.970194	99.969792
30	99.979167	99.978333	99.977500	99.976667	99.975833	99.975000	99.974167	99.973333	99.972500	99.971667	99.970833	99.970000	99.969167	99.968750
31	99.978472	99.977611	99.976750	99.975889	99.975028	99.974167	99.973306	99.972444	99.971583	99.970722	99.969861	99.969000	99.968139	99.967708
32	99.977778	99.976889	99.976000	99.975111	99.974222	99.973333	99.972444	99.971556	99.970667	99.969778	99.968889	99.968000	99.967111	99.966667
33	99.977083	99.976167	99.975250	99.974333	99.973417	99.972500	99.971583	99.970667	99.969750	99.968833	99.967917	99.967000	99.966083	99.965625
34	99.976389	99.975444	99.974500	99.973556	99.972611	99.971667	99.970722	99.969778	99.968833	99.967889	99.966944	99.966000	99.965056	99.964583
35	99.975694	99.974722	99.973750	99.972778	99.971806	99.970833	99.969861	99.968889	99.967917	99.966944	99.965972	99.965000	99.964028	99.963542
36	99.975000	99.974000	99.973000	99.972000	99.971000	99.970000	99.969000	99.968000	99.967000	99.966000	99.965000	99.964000	99.963000	99.962500
37	99.974306	99.973278	99.972250	99.971222	99.970194	99.969167	99.968139	99.967111	99.966083	99.965056	99.964028	99.963000	99.961972	99.961458
38	99.973611	99.972556	99.971500	99.970444	99.969389	99.968333	99.967278	99.966222	99.965167	99.964111	99.963056	99.962000	99.960944	99.960417
39	99.972917	99.971833	99.970750	99.969667	99.968583	99.967500	99.966417	99.965333	99.964250	99.963167	99.962083	99.961000	99.959917	99.959375
40	99.972222	99.971111	99.970000	99.968889	99.967778	99.966667	99.965556	99.964444	99.963333	99.962222	99.961111	99.960000	99.958889	99.958333
41	99.971528	99.970389	99.969250	99.968111	99.966972	99.965833	99.964694	99.963556	99.962417	99.961278	99.960139	99.959000	99.957861	99.957292
42	99.970833	99.969667	99.968500	99.967333	99.966167	99.965000	99.963833	99.962667	99.961500	99.960333	99.959167	99.958000	99.956833	99.956250
43	99.970139	99.968944	99.967750	99.966556	99.965361	99.964167	99.962972	99.961778	99.960583	99.959389	99.958194	99.957000	99.955806	99.955208
44	99.969444	99.968222	99.967000	99.965778	99.964556	99.963333	99.962111	99.960889	99.959667	99.958444	99.957222	99.956000	99.954778	99.954167
45	99.968750	99.967500	99.966250	99.965000	99.963750	99.962500	99.961250	99.960000	99.958750	99.957500	99.956250	99.955000	99.953750	99.953125
46	99.968056	99.966778	99.965500	99.964222	99.962944	99.961667	99.960389	99.959111	99.957833	99.956556	99.955278	99.954000	99.952722	99.952083
47	99.967361	99.966056	99.964750	99.963444	99.962139	99.960833	99.959528	99.958222	99.956917	99.955611	99.954306	99.953000	99.951694	99.951042
48	99.966667	99.965333	99.964000	99.962667	99.961333	99.960000	99.958667	99.957333	99.956000	99.954667	99.953333	99.952000	99.950667	99.950000
49	99.965972	99.964611	99.963250	99.961889	99.960528	99.959167	99.957806	99.956444	99.955083	99.953722	99.952361	99.951000	99.949639	99.948958
50	99.965278	99.963889	99.962500	99.961111	99.959722	99.958333	99.956944	99.955556	99.954167	99.952778	99.951389	99.950000	99.948611	99.947917
51	99.964583	99.963167	99.961750	99.960333	99.958917	99.957500	99.956083	99.954667	99.953250	99.951833	99.950417	99.949000	99.947583	99.946875
52	99.963889	99.962444	99.961000	99.959556	99.958111	99.956667	99.955222	99.953778	99.952333	99.950889	99.949444	99.948000	99.946556	99.945833
53	99.963194	99.961722	99.960250	99.958778	99.957306	99.955833	99.954361	99.952889	99.951417	99.949944	99.948472	99.947000	99.945528	99.944792
54	99.962500	99.961000	99.959500	99.958000	99.956500	99.955000	99.953500	99.952000	99.950500	99.949000	99.947500	99.946000	99.944500	99.943750
55	99.961806	99.960278	99.958750	99.957222	99.955694	99.954167	99.952639	99.951111	99.949583	99.948056	99.946528	99.945000	99.943472	99.942708
56	99.961111	99.959556	99.958000	99.956444	99.954889	99.953333	99.951778	99.950222	99.948667	99.947111	99.945556	99.944000	99.942444	99.941667
57	99.960417	99.958833	99.957250	99.955667	99.954083	99.952500	99.950917	99.949333	99.947750	99.946167	99.944583	99.943000	99.941417	99.940625
58	99.959722	99.958111	99.956500	99.954889	99.953278	99.951667	99.950056	99.948444	99.946833	99.945222	99.943611	99.942000	99.940389	99.939683
59	99.959028	99.957389	99.955750	99.954111	99.952472	99.950833	99							

DISCOUNT RATE AND PRICE PER \$100

0.38%		0.39%		0.40%		0.41%		0.42%		0.43%		0.44%		0.45%		0.46%		0.47%		0.48%		0.49%		0.50%		Days Run	
99.998944	99.998917	99.998889	99.998861	99.998833	99.998806	99.998778	99.998750	99.998722	99.998694	99.998667	99.998639	99.998611	99.998583	99.998556	99.998528	99.998500	99.998472	99.998444	99.998416	99.998389	99.998361	99.998333	99.998306	99.998278	99.998250	99.998222	1
99.997889	99.997833	99.997778	99.997722	99.997667	99.997611	99.997556	99.997500	99.997444	99.997389	99.997333	99.997278	99.997222	99.997167	99.997111	99.997056	99.997000	99.996944	99.996889	99.996833	99.996778	99.996722	99.996667	99.996611	99.996556	99.996500	99.996444	2
99.996833	99.996750	99.996667	99.996583	99.996500	99.996417	99.996333	99.996250	99.996167	99.996083	99.996000	99.995917	99.995833	99.995750	99.995667	99.995583	99.995500	99.995417	99.995333	99.995250	99.995167	99.995083	99.995000	99.994917	99.994833	99.994750	99.994667	3
99.995778	99.995667	99.995556	99.995444	99.995333	99.995222	99.995111	99.995000	99.994889	99.994778	99.994667	99.994556	99.994444	99.994333	99.994222	99.994111	99.994000	99.993889	99.993778	99.993667	99.993556	99.993444	99.993333	99.993222	99.993111	99.993000	99.992889	4
99.994722	99.994583	99.994444	99.994306	99.994167	99.994028	99.993889	99.993750	99.993611	99.993472	99.993333	99.993194	99.993056	99.992917	99.992778	99.992639	99.992500	99.992361	99.992222	99.992083	99.991944	99.991806	99.991667	99.991528	99.991389	99.991250	99.991111	5
99.993667	99.993500	99.993333	99.993167	99.993000	99.992833	99.992667	99.992500	99.992333	99.992167	99.992000	99.991833	99.991667	99.991500	99.991333	99.991167	99.991000	99.990833	99.990667	99.990500	99.990333	99.990167	99.990000	99.989833	99.989667	99.989500	99.989333	6
99.992611	99.992417	99.992222	99.992028	99.991833	99.991639	99.991444	99.991250	99.991056	99.990861	99.990667	99.990472	99.990278	99.990083	99.989889	99.989694	99.989500	99.989306	99.989111	99.988917	99.988722	99.988528	99.988333	99.988139	99.987944	99.987750	99.987556	7
99.991556	99.991333	99.991111	99.990889	99.990667	99.990444	99.990222	99.990000	99.989778	99.989556	99.989333	99.989111	99.988889	99.988667	99.988444	99.988222	99.988000	99.987778	99.987556	99.987333	99.987111	99.986889	99.986667	99.986444	99.986222	99.986000	99.985778	8
99.990500	99.990250	99.990000	99.989750	99.989500	99.989250	99.989000	99.988750	99.988500	99.988250	99.988000	99.987750	99.987500	99.987250	99.987000	99.986750	99.986500	99.986250	99.986000	99.985750	99.985500	99.985250	99.985000	99.984750	99.984500	99.984250	99.984000	9
99.989444	99.989167	99.988889	99.988611	99.988333	99.988056	99.987778	99.987500	99.987222	99.986944	99.986667	99.986389	99.986111	99.985833	99.985556	99.985278	99.985000	99.984722	99.984444	99.984167	99.983889	99.983611	99.983333	99.983056	99.982778	99.982500	99.982222	10
99.988389	99.988083	99.987778	99.987472	99.987167	99.986861	99.986556	99.986250	99.985944	99.985639	99.985333	99.985028	99.984722	99.984416	99.984111	99.983806	99.983500	99.983194	99.982889	99.982583	99.982278	99.981972	99.981667	99.981361	99.981056	99.980750	99.980444	11
99.987333	99.987000	99.986667	99.986333	99.986000	99.985667	99.985333	99.985000	99.984667	99.984333	99.984000	99.983667	99.983333	99.983000	99.982667	99.982333	99.982000	99.981667	99.981333	99.981000	99.980667	99.980333	99.980000	99.979667	99.979333	99.979000	99.978667	12
99.986278	99.985917	99.985556	99.985194	99.984833	99.984444	99.984056	99.983667	99.983278	99.982889	99.982500	99.982111	99.981722	99.981333	99.980944	99.980556	99.980167	99.979778	99.979389	99.979000	99.978611	99.978222	99.977833	99.977444	99.977056	99.976667	99.976278	13
99.985222	99.984833	99.984444	99.984056	99.983667	99.983278	99.982889	99.982500	99.982111	99.981722	99.981333	99.980944	99.980556	99.980167	99.979778	99.979389	99.979000	99.978611	99.978222	99.977833	99.977444	99.977056	99.976667	99.976278	99.975889	99.975500	99.975111	14
99.984167	99.983750	99.983333	99.982917	99.982500	99.982083	99.981667	99.981250	99.980833	99.980417	99.980000	99.979583	99.979167	99.978750	99.978333	99.977917	99.977500	99.977083	99.976667	99.976250	99.975833	99.975417	99.975000	99.974583	99.974167	99.973750	99.973333	15
99.983111	99.982667	99.982222	99.981778	99.981333	99.980889	99.980444	99.980000	99.979556	99.979111	99.978667	99.978222	99.977778	99.977333	99.976889	99.976444	99.976000	99.975556	99.975111	99.974667	99.974222	99.973778	99.973333	99.972889	99.972444	99.972000	99.971556	16
99.982056	99.981583	99.981111	99.980639	99.980167	99.979694	99.979222	99.978750	99.978278	99.977806	99.977333	99.976861	99.976389	99.975917	99.975444	99.974972	99.974500	99.974028	99.973556	99.973083	99.972611	99.972139	99.971667	99.971194	99.970722	99.970250	99.969778	17
99.981000	99.980500	99.980000	99.979500	99.979000	99.978500	99.978000	99.977500	99.977000	99.976500	99.976000	99.975500	99.975000	99.974500	99.974000	99.973500	99.973000	99.972500	99.972000	99.971500	99.971000	99.970500	99.970000	99.969500	99.969000	99.968500	99.968000	18
99.979944	99.979417	99.978889	99.978361	99.977833	99.977306	99.976778	99.976250	99.975722	99.975194	99.974667	99.974139	99.973611	99.973083	99.972556	99.972028	99.971500	99.970972	99.970444	99.969917	99.969389	99.968861	99.968333	99.967806	99.967278	99.966750	99.966222	19
99.978889	99.978333	99.977778	99.977222	99.976667	99.976111	99.975556	99.975000	99.974444	99.973889	99.973333	99.972778	99.972222	99.971667	99.971111	99.970556	99.970000	99.969444	99.968889	99.968333	99.967778	99.967222	99.966667	99.966111	99.965556	99.965000	99.964444	20
99.977833	99.977250	99.976667	99.976083	99.975500	99.974917	99.974333	99.973750	99.973167	99.972583	99.972000	99.971417	99.970833	99.970250	99.969667	99.969083	99.968500	99.967917	99.967333	99.966750	99.966167	99.965583	99.965000	99.964417	99.963833	99.963250	99.962667	21
99.976778	99.976167	99.975556	99.974944	99.974333	99.973722	99.973111	99.972500	99.971889	99.971278	99.970667	99.970056	99.969444	99.968833	99.968222	99.967611	99.967000	99.966389	99.965778	99.965167	99.964556	99.963944	99.963333	99.962722	99.962111	99.961500	99.960889	22
99.975722	99.975083	99.974444	99.973806	99.973167	99.972528	99.971889	99.971250	99.970611	99.969972	99.969333	99.968667	99.968000	99.967333	99.966667	99.966000	99.965333	99.964667	99.964000	99.963333	99.962667	99.962000	99.961333	99.960667	99.959972	99.959333	99.958667	23
99.974667	99.974000	99.973333	99.972667	99.972000	99.971333	99.970667	99.970000	99.969333	99.968667	99.968000	99.967333	99.966667	99.966000	99.965333	99.964667	99.964000	99.963333	99.962667	99.962000	99.961333	99.960667	99.959972	99.959333	99.958667	99.958000	99.957333	24
99.973611	99.972917	99.972222	99.971528	99.970833	99.970139	99.969444	99.968750	99.968056	99.967361	99.966667	99.965972	99.965278	99.964583	99.963889	99.963200	99.962500	99.961806	99.961111	99.960417	99.959722	99.959028	99.958333	99.957639	99.956944	99.956250	99.955556	25
99.972556	99.971833	99.971111	99.970389	99.969667	99.968944	99.968222	99.967500	99.966778	99.966056	99.965333	99.964611	99.963889	99.963167	99.962444	99.961722	99.961000	99.960278	99.959556	99.958833	99.958111	99.957389	99.956667	99.955944	99.955222	99.954500	99.953778	26
99.971500	99.970750	99.970000	99.969250	99.968500	99.967750	99.967000	99.966250	99.965500	99.964750	99.964000	99.963250	99.962500	99.961750	99.961000	99.960250	99.959500	99.958750	99.958000	99.957250	99.956500	99.955750	99.955000	99.954250	99.953500	99.952750	99.952000	27
99.970444	99.969667	99.968889	99.968111	99.967333	99.966556	99.965778	99.965000	99.964222	99.963444	99.962667	99.961889	99.961111	99.960333	99.959556	99.958778	99.958000	99.957222	99.956444	99.955667	99.954889	99.954111	99.953333	99.952556	99.951778	99.951000	99.950222	28
99.969389	99.968583	99.967778	99.966972	99.966167	99.965361	99.964556	99.963750	99.962944	99.962139	99.961333	99.960528	99.959722	99.958917	99.958111	99.957306	99.956500	99.955694	99.954889	99.954083	99.953278	99.952472	99.951667	99.950861	99.950056	99.949250	99.948444	29
99.968333	99.967500	99.966667	99.965833	99.965000	99.964167	99.963333	99.962500	99.961667	99.960833	99.960000	99.959167	99.958333	99.957500	99.956667	99.955833	99.955000	99.954167	99.953333	99.952500	99.951667	99.950833	99.950000	99.949167	99.948333	99.947500	99.946667	30
99.967278	99.966417	99.965556	99.964694	99.963833	99.962972	99.962111	99.961250	99.960389	99.959528	99.958667	99.957806	99.956944	99.956083	99.955222	99.954361	99.953500	99.952639	99.951778	99.950917	99.950056	99.949194	99.948333	99.947472	99.946611	99.945750	99.944889	31
99.966222	99.965333	99.964444	99.963556	99.962667	99.961778	99.960889	99.960000	99.959111	99.958222	99.957333	99.95																