

SCHOENMAN'S  
BUTTER FAT  
AND  
DIVIDEND  
CALCULATOR



Nº 1069





A BUTTER FAT AND DIVIDEND

# CALCULATOR

FOR

OPERATORS AND SECRETARIES

OF

CREAMERIES AND CHEESE FACTORIES

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BY

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## PREFACE.

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Since the invention of the Babcock Test, and the dividing of money according to the test, in butter and cheese factories, Secretaries have found it a great task to thus divide the money in the ordinary way of figuring. And believing that computation tables wherewith the work of calculating the butter fat of milk, and the money value of the same can be easily and quickly accomplished, would be hailed by the rank and file of factory operators and Secretaries of butter and cheese factories, we have for such arranged this *Butter Fat and Dividend Calculator*, and would kindly request that the instructions for using the various tables be thoroughly studied and well understood before attempting to use the tables. The author's further aim in arranging this little book was, to make it so plain and comprehensive as to be useful as a text-book in the various dairy schools where the Babcock Test system, and the dividing of the money under the system, is taught.

Part I gives instructions for using the various computating tables.

Part II illustrates, by example, how the money may be divided.

Part III is devoted to the various computating tables of the book, by the use of which dividends to factory patrons can be made very quickly and correctly.

THE AUTHOR.

*Plain, Wis.*





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## INSTRUCTIONS FOR USING CALCULATING TABLE IN DETERMINING AMOUNT OF BUTTER FAT.

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1. The calculated fat for 3.6% milk will be found on page 36, the page always corresponding to the test  $\times 10$ .

2. The left side of each page will show the calculated fat for the hundreds and thousands column of your figures, while the right side of the page is used to show the calculated fat for the units and tens column.

3. Suppose you wish to find the calculated fat for 2440 lbs. of milk which tests 3.8. First, cut off the two right hand figures (40). Then turn to page 38, and on the right half of the page find the number 40; to the right of which find 1.5 the calculated butter fat.

4. Next, on the left half of the same page, find the number 24, to the right of which find 91.2, the calculated fat, which place above the former amount, 1.5, and add; making 92.7 lbs. of butter fat.

5. When using this calculator, group your milk which tests alike together, to avoid turning over from one page to the other, unnecessarily. Thus: Suppose patrons A, E, and H all test alike, say 3.4. Turn to page 34 and find the calculated butter fat of those three before you turn the leaf, and so on with all the other patrons, testing alike.

6. Many factory operators divide the month into four periods, and average the test by adding the four tests and then dividing by four. Thus—

A tests  $3.8 + 4.0 + 3.6 + 3.5 = 14.9$ , and  $14.9 \div 4 = 3.725$ , average test. You will notice that the 25 to the right of the 3.7 is not taken in the calculating table of this book, hence I will here insert a rule by which you can quickly calculate any such fractions.

7. By reading not closer than tenth (and no one testing full milk should read closer), you may get the following fractions smaller than tenths to figure separate: Either .05, .025 or .075, all of which are quickly figured, thus—

8. Rule: Point off three places from the right of any amount of milk, and divide by 2 to get the fat for .05. To get the fat for .025 divide by 4; for .075, divide by 4 and multiply by 3. Thus:

$$\begin{array}{r} \text{Milk.} \\ 2 \overline{) 2.540} \\ \underline{1.3 \text{ fat}} \end{array} \quad \begin{array}{r} \text{Milk.} \\ 4 \overline{) 2.540} \\ \underline{.6 \text{ fat}} \end{array} \quad \begin{array}{r} \text{Milk.} \\ 4 \overline{) 2.540} \\ \underline{.63 \times 3 = 1.9 \text{ fat.}} \end{array}$$

Again, take 8,460 lbs of milk—

$$\begin{array}{r} \text{Milk.} \\ 2 \overline{) 8.460} \\ \underline{4.2 \text{ fat}} \end{array} \quad \begin{array}{r} \text{Milk.} \\ 4 \overline{) 8.460} \\ \underline{2.1 \text{ fat}} \end{array} \quad \begin{array}{r} \text{Milk.} \\ 4 \overline{) 8.460} \\ \underline{2.1 \times 3 = 6.3 \text{ fat.}} \end{array}$$

In taking semi-monthly tests you get only .05, which can readily be calculated, mentally, by above rule.

9. Suppose you have 30 patrons, in a lot of 50, that have some of those extra fractions as indicated in rule under 8. With a little practice you can figure those extra fractions for 30 patrons and add their extra fat thus obtained to their other fat in less than 15 minutes' time.

10. Ten thousand pounds is the largest amount calculated in this book, but any amount you may have above may be readily calculated thus: Suppose you have 14,840 lbs. milk—test, 3.4—10,000 lbs. of 3.4 milk equals

340 lbs. of butter fat. Then find calculated fat for 4,840 lbs. milk, and add to the 340 lbs. obtained from the 10,000 lbs. You will observe that the butter fat for 10,000 lbs. milk, at any test, is easily calculated mentally.

Example: 10,000 lbs.—test, 3.6 = 360.

10,000 lbs.—test, 4.2 = 420.

10,000 lbs.—test, 3.9 = 390; etc.

Many factories make tests every ten days, which would make extra fractions, spoken of on previous page, either .033 or .066; which would be figured thus:

Example: Milk.  

$$3 \overline{) 2\ 360}$$
 .8 fat

Milk.  

$$3 \overline{) 2.360}$$

$$.8 \times 2 = 1.6 \text{ fat.}$$

## INSTRUCTIONS FOR USING THE MONEY CALCULATING TABLES.

---

1. Suppose the total amount of money due the patrons for the month is \$1,575.00, and the total amount of butter fat delivered by the patrons is 7,000 lbs., then  $\$1,575.00 \div 7,000 = \$.225$ , the price per lb. for butter fat. Now turn to the Money Calculating Table, and find the .225 table, which is used thus—

2. Suppose A has delivered 286 lbs. of butter fat, use the products in the \$.225 table set after 2, 8 and 6. Thus:

After 6	1350
After 8	1800
After 2	450

---

\$64.350

which gives the correct amount of money. Use the table in a similar manner to find each patron's money. A little practice with these tables will convince you that they are very useful.

3. Usually secretaries manage to get the price of butter fat to an even cent, or an even half cent, by carrying over a small surplus or by making up a small deficit, to be taken out of the proceeds of the succeeding month.

4. Suppose you find by exact figures that your butter fat for the month will bring \$.2462 per lb., and you have 5,250 lbs. butter fat. Now, it is a very good plan to carry over \$6.30 to the next month, and the price of your butter fat will be \$.245. Then calculate your dividends by the \$.245 table on page 61, in this book. Or, suppose your exact price for butter fat was \$.2438, by

drawing on the succeeding month for \$6.30, you would have \$.245 per lb. of butter fat, and can make use of the same table. By thus adjusting the price to suit the tables much hard work in figuring can be avoided.

5. Secretaries who do not wish to adjust the price of butter fat as above recommended, and wish to use the price exactly as found, can greatly facilitate their work by making a table to suit their price.

6. Suppose the price per lb. of butter fat is found to be \$.268, construct the following table, and use it per instructions given in number 2.

Thus—

$$268 \times 1 = 268$$

$$268 \times 2 = 536$$

$$268 \times 3 = 804$$

etc., to  $268 \times 9$ .

The table can be made in a few minutes, and can be applied to the entire list of patrons, and will save a great amount of figuring.

You can construct tables at any price you wish, to suit the price. Suppose your exact price is \$.2668, then make table thus:

$$2668 \times 1 = 2668$$

$$2668 \times 2 = 5336$$

$$2668 \times 3 = 8004 \quad \text{etc.}$$

## INSTRUCTIONS FOR BUTTER DIVIDENDS.

---

1. Although it is more work to make dividends in which the actual number of pounds of butter are given, nevertheless some operators wish to make such statements to satisfy the wishes of their patrons. Those wishing to make such dividends can best determine each patron's butter by using the Surplus Butter Table, given on page 63, as recommended by Dr. Babcock. The table will give the number of pounds of butter per 100 lbs. of milk for any test from 3 to 5.6%.

2. Example: Suppose you find the surplus butter over the fat to be 1.12, then use 1.12 column. If A's milk tests 3.6, you will find his butter yield to be 4.032. Suppose he delivers 2460 lbs. of milk, then, to determine his total butter, multiply 2460 (pointing off two places for hundreds), by 4.032—thus:

$$24.60 \times 4.032 = 99.18 + \text{lbs. butter.}$$

3. After determining each patron's butter, and the price per pound, use the Money Calculating Table to determine each patron's money, as per instructions for using the Money Calculating Tables, and if your price for butter does not correspond with any of the tables given construct a table to suit your price, as shown in No. 6, under Instructions for Using Money Calculating Tables.



## INSTRUCTIONS FOR USING THE RELATIVE VALUE TABLE.

(Showing the relative price per 100 lbs. milk.)

---

The 4% horizontal line of figures in heavy type is used as the guiding line, and is  $4 \times$  the price of butter fat. Suppose the butter fat brings 25 cents, then the price in heavy type (horizontal line), would be \$1.00, and you would have to use the perpendicular column, in which will be found \$1.00 in heavy type; and you will find that 4.2% milk is worth \$1.05; 4.4% milk, \$1.10; while 3% will be shown to be worth \$.75. Suppose the butter fat is worth 21.12 cents, it would make the price of 4% milk 84.48 cents, and the table could not be used unless the .12 cents were dropped and the amount carried over to be taken in the succeeding month as advised under "Instructions for Using the Money Calculating Tables" in sections 3 and 4.

You will notice that in order to get the price for 4% milk to an even cent per hundred, butter fat will have to end in the fraction of  $\frac{1}{4}$ c,  $\frac{1}{2}$ c, or  $\frac{3}{4}$ c, or full cent, in every case.

You will find this table very handy for quick work, but not strictly accurate.

## HOW TO DIVIDE THE MONEY

---

1. **The Correct Way.** Let us suppose that there is one composite test taken weekly, and

A has for the first week	2,046 lbs. milk-test,	3.2 equals fat	65.47		
B	“ “ 822 “ “	4.1	“ 33.70		
C	“ “ 625 “ “	4.6	“ 28.75		
A has the second week,	1,820 “ “	3.3	“ 60.06		
B	“ “ 780 “ “	4.0	“ 31.20		
C	“ “ 725 “ “	4.2	“ 30.45		
A has the third week,	2,244 “ “	3.0	“ 67.32		
B	“ “ 1,000 “ “	4.2	“ 42.00		
C	“ “ 650 “ “	4.4	“ 28.60		
A has the fourth week,	2,120 “ “	3.1	“ 65.72		
B	“ “ 962 “ “	4.0	“ 38.48		
C	“ “ 720 “ “	4.1	“ 29.52		
	<hr style="width: 10%; margin-left: auto; margin-right: 0;"/>			Total,	521.27
	Total,	14,514			

A's milk for month,	8,230 lbs. equals	258.57 fat.			
B's	“ “ 3,564 “ “	145.38	“		
C's	“ “ 2,720 “ “	117.32	“		
	<hr style="width: 10%; margin-left: auto; margin-right: 0;"/>			Total,	521.27
	Total,	14,514			

### 2. **The Butter Sales.**

First shipment,	4-40 lb. tubs,	160 lbs. net amount,	\$40.00		
Second	“ 2-60 “ “	120 “ “	32.20		
Third	“ 2-60 “ “	120 “ “	30.50		
Fourth	“ 2-60 “ “	120 “ “	31.60		
Home sales,		50 “ “	12.50		
A drew		10 “ “	2.50		
B drew		6 “ “	1.50		
		<hr style="width: 10%; margin-left: auto; margin-right: 0;"/>		Total,	\$150.80
		Total,	586		
Cost of manufacturing	586 lbs. at 4c.				23.44
					<hr style="width: 10%; margin-left: auto; margin-right: 0;"/>
The patrons' share is,					\$127.36

If 521.27 lbs. fat are worth \$127.36, 1 lb. of fat is worth 24.43c.

A's share equals	$258.57 \times 24.43c$ ,	equals	\$63.16	}	\$127.36
B's " "	$145.38 \times 24.43$	" "	35.53		
C's " "	$117.32 \times 24.43$	" "	28.67		

N. B.—Most secretaries carry over the amount brought about by the small fractions, to save figuring. If, in the above case, we carry \$2.26 forward to the next month, we would have:

A's share equals	$258.57 \times .24c$ .	equals	\$62.05	}	\$125.10
B's " "	$145.38 \times .24c$ .	" "	34 89		
C's " "	$117.32 \times .24c$ .	" "	28.16		
					2.26 carried over.
					\$127.36

**3. The Practical Way.** Taking the same milk and the same test we find it as follows: Here we find the average test by adding the four tests together and dividing by four.

A. 8,230 lbs. milk.	Average test for month	3.15	=	259.25	lbs fat.
B. 3,564 " "	" "	" "	" "	4.075	= 145.23 " "
C. 2,720 " "	" "	" "	" "	4.325	= 117.64 " "
					Total, 522.12 " "

N. B.—We find that in this case we have nearly one pound of fat more for the total. By inspection we find that A has nearly one pound more than in the former statement, while B has a trifle less and C has a trifle more.

Of course, if cows vary very widely in test and in milk yield from week to week, we would recommend the "correct way" But for general practical purpose the incorrectness of this "practical way" is so slight, and labor saved in figuring so marked, that most any one will be justified in using it.

4. A's Butter Statement.

	Pounds.	Price.	
		Dols.	Cts.
Total No. pounds milk.....	14,514	.....	.....
Total No. pounds butter.....	586	.....	.....
Average net price for butter.....			25.73
Net receipts for butter .....		150	80
For making butter @ 4c.....		23	44
Net amount due patrons.....		127	36
Per pound of butter fat (net to patrons).....			24.43
General average test.....	3.59%	.....	.....
Your average test.....	3.141	.....	.....
Your No. of pounds of milk.....	8,230	.....	.....
Your butter fat.....	258.57	.....	.....
Your net proceeds.....		63	16
10 pounds butter drawn (@ 25c.....		2	50
Amount due you.....		\$60	66

5. Dividing Cheese Money. Taking the same figures as in butter:

A's milk for month.	8,230 pounds.	Fat,	258.57
B's " "	3,564 pounds.	"	145.38
C's " "	2,720 pounds.	"	117.32
Total " "	14,514	Total " "	521.27

Suppose you get 1,450 pounds cheese, selling at ten cents net, making total amount of money..... \$145.00  
 Manufacturing of 1,450 @ 1½ cents per pound, equals.... 21.75

Leaving patrons ..... \$123.25

If 521.27 pounds fat are worth \$123.25, one pound of fat is worth 23.64+ cents.

A's share equals	258.57 × 23.64+c.	equals	\$61.13
B's " "	145.38 × 23.64+	"	34.38
C's " "	117.32 × 23.64+	"	27.74

Total..... \$123.25

N. B.—In dividing the money in this case the secretary might have taken out seventy-seven cents and given it to the patrons the following month. He would then have: money, \$122.48; fat, 521.27; price for fat, 23.5; saving much labor in figuring.

6. A's Cheese Statement.

	Pounds.	Price.	
		Dol.	Cts.
Total No. pounds milk .....	14,514	.....	.....
Total No. pounds cheese.....	1,450	.....	.....
Average net price per pound (cheese).....			10
Net receipts for cheese.....		145	00
Making and selling @ 1½ cents.....		21	75
Net amount due patrons.....		123	25
Per pound butter fat (net to patron).....			23.64+
Your amount of milk.....	8,230	.....	.....
General average test.....	3.59%	.....	.....
Your average test.....	3.14%	.....	.....
Your butter fat.....	258.57	.....	.....
Your net proceeds.....		61	13

P. S.—Suppose A had drawn fifty pounds of cheese, and 1,400 pounds were sold to the buyer. We, of course, would have charged him the same, and would now get our pay by taking it out of the \$61.13, leaving him \$61.13 — \$5.00 = \$56.13.

Before closing these chapters the writer would like to add that recent investigations tend to confirm the fact that satisfactory results can be obtained by making composite tests only every ten days, or even better than that, viz.: semi-monthly. A great advantage under semi-monthly composite tests would be that in making monthly dividends the secretary would have to deal with no worse fractions than tenths or five one hundredths, either of which is a very easy and simple fraction to handle; the assumption being that tests are read not closer than tenths.



# Computating Tables

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*[For Convenience the Following Tables Begin with Page 29.]*





## 2.9 PER CENT. TEST.

29

MILK.	FAT.	MILK.	FAT.	MILK.	FAT.	MILK.	FAT.
1	2.9	51	147.9	1	.....	51	1.5
2	5.8	52	150.8	2	.....	52	1.5
3	8.7	53	153.7	3	.1	53	1.5
4	11.6	54	156.6	4	.1	54	1.5
5	14.5	55	159.5	5	.1	55	1.6
6	17.4	56	162.4	6	.2	56	1.6
7	20.3	57	165.3	7	.2	57	1.6
8	23.2	58	168.2	8	.2	58	1.7
9	26.1	59	171.1	9	.2	59	1.7
10	29.0	60	174.0	10	.3	60	1.7
11	31.9	61	176.9	11	.3	61	1.7
12	34.8	62	179.8	12	.3	62	1.8
13	37.7	63	182.7	13	.4	63	1.8
14	40.6	64	185.6	14	.4	64	1.8
15	43.5	65	188.5	15	.4	65	1.9
16	46.4	66	191.4	16	.4	66	1.9
17	49.3	67	194.3	17	.5	67	1.9
18	52.2	68	197.2	18	.5	68	2.0
19	55.1	69	200.1	19	.5	69	2.0
20	58.0	70	203.0	20	.6	70	2.0
21	60.9	71	205.9	21	.6	71	2.0
22	63.8	72	208.8	22	.6	72	2.1
23	66.7	73	211.7	23	.6	73	2.1
24	69.6	74	214.6	24	.7	74	2.1
25	72.5	75	217.5	25	.7	75	2.1
26	75.4	76	220.4	26	.7	76	2.2
27	78.3	77	223.3	27	.8	77	2.2
28	81.2	78	226.2	28	.8	78	2.2
29	84.1	79	229.1	29	.8	79	2.3
30	87.0	80	232.0	30	.9	80	2.3
31	89.9	81	234.9	31	.9	81	2.3
32	92.8	82	237.8	32	.9	82	2.4
33	95.7	83	240.7	33	.9	83	2.4
34	98.6	84	243.6	34	1.0	84	2.4
35	101.5	85	246.5	35	1.0	85	2.4
36	104.4	86	249.4	36	1.0	86	2.5
37	107.3	87	252.3	37	1.1	87	2.5
38	110.2	88	255.2	38	1.1	88	2.5
39	113.1	89	258.1	39	1.1	89	2.6
40	116.0	90	261.0	40	1.1	90	2.6
41	118.9	91	263.9	41	1.2	91	2.6
42	121.8	92	266.8	42	1.2	92	2.6
43	124.7	93	269.7	43	1.2	93	2.7
44	127.6	94	272.6	44	1.3	94	2.7
45	130.5	95	275.5	45	1.3	95	2.7
46	133.4	96	278.4	46	1.3	96	2.8
47	136.3	97	281.3	47	1.3	97	2.8
48	139.2	98	284.2	48	1.4	98	2.8
49	142.1	99	287.1	49	1.4	99	2.9
50	145.0	100	290.0	50	1.4	100	2.9

## 3.0 PER CENT. TEST.

MILK.	FAT.	MILK.	FAT.	MILK.	FAT.	MILK.	FAT.
1	3.0	51	153.0	1	.....	51	1.5
2	6.0	52	156.0	2	.....	52	1.5
3	9.0	53	159.0	3	.1	53	1.6
4	12.0	54	162.0	4	.1	54	1.6
5	15.0	55	165.0	5	.1	55	1.6
6	18.0	56	168.0	6	.2	56	1.7
7	21.0	57	171.0	7	.2	57	1.7
8	24.0	58	174.0	8	.2	58	1.7
9	27.0	59	177.0	9	.3	59	1.8
10	30.0	60	180.0	10	.3	60	1.8
11	33.0	61	183.0	11	.3	61	1.8
12	36.0	62	186.0	12	.3	62	1.8
13	39.0	63	189.0	13	.4	63	1.9
14	42.0	64	192.0	14	.4	64	1.9
15	45.0	65	195.0	15	.4	65	1.9
16	48.0	66	198.0	16	.5	66	2.0
17	51.0	67	201.0	17	.5	67	2.0
18	54.0	68	204.0	18	.5	68	2.0
19	57.0	69	207.0	19	.6	69	2.1
20	60.0	70	210.0	20	.6	70	2.1
21	63.0	71	213.0	21	.6	71	2.1
22	66.0	72	216.0	22	.6	72	2.1
23	69.0	73	219.0	23	.7	73	2.2
24	72.0	74	222.0	24	.7	74	2.2
25	75.0	75	225.0	25	.7	75	2.2
26	78.0	76	228.0	26	.8	76	2.3
27	81.0	77	231.0	27	.8	77	2.3
28	84.0	78	234.0	28	.8	78	2.3
29	87.0	79	237.0	29	.9	79	2.4
30	90.0	80	240.0	30	.9	80	2.4
31	93.0	81	243.0	31	.9	81	2.4
32	96.0	82	246.0	32	.9	82	2.5
33	99.0	83	249.0	33	1.0	83	2.5
34	102.0	84	252.0	34	1.0	84	2.5
35	105.0	85	255.0	35	1.0	85	2.5
36	108.0	86	258.0	36	1.1	86	2.6
37	111.0	87	261.0	37	1.1	87	2.6
38	114.0	88	264.0	38	1.1	88	2.6
39	117.0	89	267.0	39	1.2	89	2.7
40	120.0	90	270.0	40	1.2	90	2.7
41	123.0	91	273.0	41	1.2	91	2.7
42	126.0	92	276.0	42	1.2	92	2.7
43	129.0	93	279.0	43	1.3	93	2.8
44	132.0	94	282.0	44	1.3	94	2.8
45	135.0	95	285.0	45	1.3	95	2.8
46	138.0	96	288.0	46	1.4	96	2.9
47	141.0	97	291.0	47	1.4	97	2.9
48	144.0	98	294.0	48	1.4	98	2.9
49	147.0	99	297.0	49	1.5	99	3.0
50	150.0	100	300.0	50	1.5	100	3.0

3.1 PER CENT. TEST.

MILK.	FAT.	MILK.	FAT.	MILK.	FAT.	MILK.	FAT.
1	3.1	51	158.1	1	.....	51	1.6
2	6.2	52	161.2	2	.....	52	1.6
3	9.3	53	164.3	3	.1	53	1.6
4	12.4	54	167.4	4	.1	54	1.7
5	15.5	55	170.5	5	.1	55	1.7
6	18.6	56	173.6	6	.2	56	1.7
7	21.7	57	176.7	7	.2	57	1.7
8	24.8	58	179.8	8	.2	58	1.8
9	27.9	59	182.9	9	.3	59	1.8
10	31.0	60	186.0	10	.3	60	1.8
11	34.1	61	189.1	11	.3	61	1.9
12	37.2	62	192.2	12	.4	62	1.9
13	40.3	63	195.3	13	.4	63	1.9
14	43.4	64	198.4	14	.4	64	2.0
15	46.5	65	201.5	15	.4	65	2.0
16	49.6	66	204.6	16	.5	66	2.0
17	52.7	67	207.7	17	.5	67	2.1
18	55.8	68	210.8	18	.5	68	2.1
19	58.9	69	213.9	19	.6	69	2.1
20	62.0	70	217.0	20	.6	70	2.2
21	65.1	71	220.1	21	.6	71	2.2
22	68.2	72	223.2	22	.7	72	2.2
23	71.3	73	226.3	23	.7	73	2.2
24	74.4	74	229.4	24	.7	74	2.3
25	77.5	75	232.5	25	.8	75	2.3
26	80.6	76	235.6	26	.8	76	2.3
27	83.7	77	238.7	27	.8	77	2.4
28	86.8	78	241.8	28	.8	78	2.4
29	89.9	79	244.9	29	.9	79	2.4
30	93.0	80	248.0	30	.9	80	2.5
31	96.1	81	251.1	31	.9	81	2.5
32	99.2	82	254.2	32	1.0	82	2.5
33	102.3	83	257.3	33	1.0	83	2.6
34	105.4	84	260.4	34	1.0	84	2.6
35	108.5	85	263.5	35	1.1	85	2.6
36	111.6	86	266.6	36	1.1	86	2.6
37	114.7	87	269.7	37	1.1	87	2.7
38	117.8	88	272.8	38	1.2	88	2.7
39	120.9	89	275.9	39	1.2	89	2.7
40	124.0	90	279.0	40	1.2	90	2.8
41	127.1	91	282.1	41	1.3	91	2.8
42	130.2	92	285.2	42	1.3	92	2.8
43	133.3	93	288.3	43	1.3	93	2.9
44	136.4	94	291.4	44	1.3	94	2.9
45	139.5	95	294.5	45	1.4	95	2.9
46	142.6	96	297.6	46	1.4	96	3.0
47	145.7	97	300.7	47	1.4	97	3.0
48	148.8	98	303.8	48	1.5	98	3.0
49	151.9	99	306.9	49	1.5	99	3.0
50	155.0	100	310.0	50	1.5	100	3.1

## 3.2 PER CENT. TEST

MILK.	FAT.	MILK.	FAT.	MILK.	FAT.	MILK.	FAT.
1	3.2	51	163.2	1	.....	51	1.6
2	6.4	52	166.4	2	.....	52	1.6
3	9.6	53	169.6	3	.1	53	1.7
4	12.8	54	172.8	4	.1	54	1.7
5	16.0	55	176.0	5	.1	55	1.7
6	19.2	56	179.2	6	.2	56	1.8
7	22.4	57	182.4	7	.2	57	1.8
8	25.5	58	185.6	8	.2	58	1.8
9	28.8	59	188.8	9	.3	59	1.9
10	32.0	60	192.0	10	.3	60	1.9
11	35.2	61	195.2	11	.3	61	1.9
12	38.4	62	198.4	12	.4	62	2.0
13	41.6	63	201.6	13	.4	63	2.0
14	44.8	64	204.8	14	.4	64	2.0
15	48.0	65	208.0	15	.5	65	2.1
16	51.2	66	211.2	16	.5	66	2.1
17	54.4	67	214.4	17	.5	67	2.1
18	57.6	68	217.6	18	.6	68	2.2
19	60.8	69	220.8	19	.6	69	2.2
20	64.0	70	224.0	20	.6	70	2.2
21	67.2	71	227.2	21	.7	71	2.3
22	70.4	72	230.4	22	.7	72	2.3
23	73.6	73	233.6	23	.7	73	2.3
24	76.8	74	236.8	24	.7	74	2.3
25	80.0	75	240.0	25	.8	75	2.4
26	83.2	76	243.2	26	.8	76	2.4
27	86.4	77	246.4	27	.8	77	2.4
28	89.6	78	249.6	28	.9	78	2.5
29	92.8	79	252.8	29	.9	79	2.5
30	96.0	80	256.0	30	.9	80	2.5
31	99.2	81	259.2	31	1.0	81	2.6
32	102.4	82	262.4	32	1.0	82	2.6
33	105.6	83	265.6	33	1.0	83	2.6
34	108.8	84	268.8	34	1.1	84	2.7
35	112.0	85	272.0	35	1.1	85	2.7
36	115.2	86	275.2	36	1.1	86	2.7
37	118.4	87	278.4	37	1.2	87	2.8
38	121.6	88	281.6	38	1.2	88	2.8
39	124.8	89	284.8	39	1.2	89	2.8
40	128.0	90	288.0	40	1.3	90	2.9
41	131.2	91	291.2	41	1.3	91	2.9
42	134.4	92	294.4	42	1.3	92	2.9
43	137.6	93	297.6	43	1.4	93	3.0
44	140.8	94	300.8	44	1.4	94	3.0
45	144.0	95	304.0	45	1.4	95	3.0
46	147.2	96	307.2	46	1.5	96	3.1
47	150.4	97	310.4	47	1.5	97	3.1
48	153.6	98	313.6	48	1.5	98	3.1
49	156.8	99	316.8	49	1.5	99	3.1
50	160.0	100	320.0	50	1.6	100	3.2

3.3 PER CENT. TEST.

MILK.	FAT.	MILK.	FAT.	MILK.	FAT.	MILK.	FAT.
1	3.3	51	168.3	1	.....	51	1.7
2	6.6	52	171.6	2	.....	52	1.7
3	9.9	53	174.9	3	.1	53	1.7
4	13.2	54	178.2	4	.1	54	1.8
5	16.5	55	181.5	5	.1	55	1.8
6	19.8	56	184.8	6	.2	56	1.8
7	23.1	57	188.1	7	.2	57	1.9
8	26.4	58	191.4	8	.2	58	1.9
9	29.7	59	194.7	9	.3	59	1.9
<b>10</b>	<b>33.0</b>	<b>60</b>	<b>198.0</b>	<b>10</b>	<b>.3</b>	<b>60</b>	<b>2.0</b>
11	36.3	61	201.3	11	.3	61	2.0
12	39.6	62	204.6	12	.4	62	2.0
13	42.9	63	207.9	13	.4	63	2.1
14	46.2	64	211.2	14	.4	64	2.1
15	49.5	65	214.5	15	.5	65	2.1
16	52.8	66	217.8	16	.5	66	2.2
17	56.1	67	221.1	17	.5	67	2.2
18	59.4	68	224.4	18	.6	68	2.2
19	62.7	69	227.7	19	.6	69	2.3
<b>20</b>	<b>66.0</b>	<b>70</b>	<b>231.0</b>	<b>20</b>	<b>.6</b>	<b>70</b>	<b>2.3</b>
21	69.3	71	234.3	21	.7	71	2.3
22	72.6	72	237.6	22	.7	72	2.4
23	75.9	73	240.9	23	.7	73	2.4
24	79.2	74	244.2	24	.8	74	2.4
25	82.5	75	247.5	25	.8	75	2.5
26	85.8	76	250.8	26	.8	76	2.5
27	89.1	77	254.1	27	.9	77	2.5
28	92.4	78	257.4	28	.9	78	2.6
29	95.7	79	260.7	29	.9	79	2.6
<b>30</b>	<b>99.0</b>	<b>80</b>	<b>264.0</b>	<b>30</b>	<b>1.0</b>	<b>80</b>	<b>2.6</b>
31	102.3	81	267.3	31	1.0	81	2.7
32	105.6	82	270.6	32	1.0	82	2.7
33	108.9	83	273.9	33	1.1	83	2.7
34	112.2	84	277.2	34	1.1	84	2.8
35	115.5	85	280.5	35	1.1	85	2.8
36	118.8	86	283.8	36	1.2	86	2.8
37	122.1	87	287.1	37	1.2	87	2.9
38	125.4	88	290.4	38	1.2	88	2.9
39	128.7	89	293.7	39	1.3	89	2.9
<b>40</b>	<b>132.0</b>	<b>90</b>	<b>297.0</b>	<b>40</b>	<b>1.3</b>	<b>90</b>	<b>3.0</b>
41	135.3	91	300.3	41	1.3	91	3.0
42	138.6	92	303.6	42	1.4	92	3.0
43	141.9	93	306.9	43	1.4	93	3.0
44	145.2	94	310.2	44	1.4	94	3.1
45	148.5	95	313.5	45	1.5	95	3.1
46	151.8	96	316.8	46	1.5	96	3.1
47	155.1	97	320.1	47	1.5	97	3.2
48	158.4	98	323.4	48	1.6	98	3.2
49	161.7	99	326.7	49	1.6	99	3.2
<b>50</b>	<b>165.0</b>	<b>100</b>	<b>330.0</b>	<b>50</b>	<b>1.6</b>	<b>100</b>	<b>3.3</b>

## 3.4 PER CENT. TEST

MILK.	FAT.	MILK.	FAT.	MILK.	FAT.	MILK.	FAT.
1	3.4	51	173.4	1	.....	51	1.7
2	6.8	52	176.8	2	.1	52	1.7
3	10.2	53	180.2	3	.1	53	1.8
4	13.6	54	183.6	4	.1	54	1.8
5	17.0	55	187.0	5	.2	55	1.9
6	20.4	56	190.4	6	.2	56	1.9
7	23.8	57	193.8	7	.2	57	1.9
8	27.2	58	197.2	8	.3	58	2.0
9	30.6	59	200.6	9	.3	59	2.0
10	34.0	60	204.0	10	.3	60	2.0
11	37.4	61	207.4	11	.4	61	2.1
12	40.8	62	210.8	12	.4	62	2.1
13	44.2	63	214.2	13	.4	63	2.1
14	47.6	64	217.6	14	.5	64	2.2
15	51.0	65	221.0	15	.5	65	2.2
16	54.4	66	224.4	16	.5	66	2.2
17	57.8	67	227.8	17	.6	67	2.3
18	61.2	68	231.2	18	.6	68	2.3
19	64.6	69	234.6	19	.6	69	2.3
20	68.0	70	238.0	20	.7	70	2.4
21	71.4	71	241.4	21	.7	71	2.4
22	74.8	72	244.8	22	.7	72	2.4
23	78.2	73	248.2	23	.8	73	2.5
24	81.6	74	251.6	24	.8	74	2.5
25	85.0	75	255.0	25	.8	75	2.5
26	88.4	76	258.4	26	.9	76	2.6
27	91.8	77	261.8	27	.9	77	2.6
28	95.2	78	265.2	28	.9	78	2.6
29	98.6	79	268.6	29	1.0	79	2.7
30	102.0	80	272.0	30	1.0	80	2.7
31	105.4	81	275.4	31	1.0	81	2.7
32	108.8	82	278.8	32	1.1	82	2.8
33	112.2	83	282.2	33	1.1	83	2.8
34	115.6	84	285.6	34	1.1	84	2.8
35	119.0	85	289.0	35	1.2	85	2.9
36	122.4	86	292.4	36	1.2	86	2.9
37	125.8	87	295.8	37	1.2	87	2.9
38	129.2	88	299.2	38	1.3	88	3.0
39	132.6	89	302.6	39	1.3	89	3.0
40	136.0	90	306.0	40	1.3	90	3.0
41	139.4	91	309.4	41	1.4	91	3.1
42	142.8	92	312.8	42	1.4	92	3.1
43	146.2	93	316.2	43	1.4	93	3.1
44	149.6	94	319.6	44	1.5	94	3.2
45	153.0	95	323.0	45	1.5	95	3.2
46	156.4	96	326.4	46	1.5	96	3.2
47	159.8	97	329.8	47	1.6	97	3.3
48	163.2	98	333.2	48	1.6	98	3.3
49	166.6	99	336.6	49	1.6	99	3.3
50	170.0	100	340.0	50	1.7	100	3.4

3.5 PER CENT. TEST

MILK.	FAT.	MILK.	FAT.	MILK.	FAT.	MILK.	FAT.
1	3.5	51	178.5	1	.....	51	1.8
2	7.0	52	182.0	2	.1	52	1.8
3	10.5	53	185.5	3	.1	53	1.8
4	14.0	54	189.0	4	.1	54	1.9
5	17.5	55	192.5	5	.2	55	1.9
6	21.0	56	196.0	6	.2	56	1.9
7	24.5	57	199.5	7	.2	57	2.0
8	28.0	58	203.0	8	.3	58	2.0
9	31.5	59	206.5	9	.3	59	2.0
10	35.0	60	210.0	10	.3	60	2.1
11	38.5	61	213.5	11	.4	61	2.1
12	42.0	62	217.0	12	.4	62	2.2
13	45.5	63	220.5	13	.4	63	2.2
14	49.0	64	224.0	14	.5	64	2.2
15	52.5	65	227.5	15	.5	65	2.3
16	56.0	66	231.0	16	.5	66	2.3
17	59.5	67	234.5	17	.6	67	2.3
18	63.0	68	238.0	18	.6	68	2.4
19	66.5	69	241.5	19	.6	69	2.4
20	70.0	70	245.0	20	.7	70	2.4
21	73.5	71	248.5	21	.7	71	2.5
22	77.0	72	252.0	22	.8	72	2.5
23	80.5	73	255.5	23	.8	73	2.5
24	84.0	74	259.0	24	.8	74	2.6
25	87.5	75	262.5	25	.9	75	2.6
26	91.0	76	266.0	26	.9	76	2.6
27	94.5	77	269.5	27	.9	77	2.7
28	98.0	78	273.0	28	1.0	78	2.7
29	101.5	79	276.5	29	1.0	79	2.7
30	105.0	80	280.0	30	1.0	80	2.8
31	108.5	81	283.5	31	1.1	81	2.8
32	112.0	82	287.0	32	1.1	82	2.9
33	115.5	83	290.5	33	1.1	83	2.9
34	119.0	84	294.0	34	1.2	84	2.9
35	122.5	85	297.5	35	1.2	85	3.0
36	126.0	86	301.0	36	1.2	86	3.0
37	129.5	87	304.5	37	1.3	87	3.0
38	133.0	88	308.0	38	1.3	88	3.1
39	136.5	89	311.5	39	1.3	89	3.1
40	140.0	90	315.0	40	1.4	90	3.1
41	143.5	91	318.5	41	1.4	91	3.2
42	147.0	92	322.0	42	1.5	92	3.2
43	150.5	93	325.5	43	1.5	93	3.2
44	154.0	94	329.0	44	1.6	94	3.3
45	157.5	95	332.5	45	1.6	95	3.3
46	161.0	96	336.0	46	1.6	96	3.3
47	164.5	97	339.5	47	1.6	97	3.4
48	168.0	98	343.0	48	1.7	98	3.4
49	171.5	99	346.5	49	1.7	99	3.4
50	175.0	100	350.0	50	1.7	100	3.5

## 3.6 PER CENT. TEST

MILK.	FAT.	MILK.	FAT.	MILK.	FAT.	MILK.	FAT.
1	3.6	51	183.6	1	.....	51	1.8
2	7.2	52	187.2	2	.1	52	1.9
3	10.8	53	190.8	3	.1	53	1.9
4	14.4	54	194.4	4	.1	54	1.9
5	18.0	55	198.0	5	.2	55	2.0
6	21.6	56	201.6	6	.2	56	2.0
7	25.2	57	205.2	7	.2	57	2.0
8	28.8	58	208.8	8	.3	58	2.1
9	32.4	59	212.4	9	.3	59	2.1
10	36.0	60	216.0	10	.3	60	2.1
11	39.6	61	219.6	11	.4	61	2.2
12	43.2	62	223.2	12	.4	62	2.2
13	46.8	63	226.8	13	.4	63	2.2
14	50.4	64	230.4	14	.5	64	2.3
15	54.0	65	234.0	15	.5	65	2.3
16	57.6	66	237.6	16	.6	66	2.4
17	61.2	67	241.2	17	.6	67	2.4
18	64.8	68	244.8	18	.6	68	2.4
19	68.4	69	248.4	19	.7	69	2.5
20	72.0	70	252.0	20	.7	70	2.5
21	75.6	71	255.6	21	.7	71	2.5
22	79.2	72	259.2	22	.8	72	2.6
23	82.8	73	262.8	23	.8	73	2.6
24	86.4	74	266.4	24	.8	74	2.6
25	90.0	75	270.0	25	.9	75	2.7
26	93.6	76	273.6	26	.9	76	2.7
27	97.2	77	277.2	27	1.0	77	2.8
28	100.8	78	280.8	28	1.0	78	2.8
29	104.4	79	284.4	29	1.0	79	2.8
30	108.0	80	288.0	30	1.1	80	2.9
31	111.6	81	291.6	31	1.1	81	2.9
32	115.2	82	295.2	32	1.1	82	2.9
33	118.8	83	298.8	33	1.2	83	3.0
34	122.4	84	302.4	34	1.2	84	3.0
35	126.0	85	306.0	35	1.2	85	3.0
36	129.6	86	309.6	36	1.3	86	3.1
37	133.2	87	313.2	37	1.3	87	3.1
38	136.8	88	316.8	38	1.3	88	3.1
39	140.4	89	320.4	39	1.4	89	3.2
40	144.0	90	324.0	40	1.4	90	3.2
41	147.6	91	327.6	41	1.5	91	3.3
42	151.2	92	331.2	42	1.5	92	3.3
43	154.8	93	334.8	43	1.5	93	3.3
44	158.4	94	338.4	44	1.6	94	3.4
45	162.0	95	342.0	45	1.6	95	3.4
46	165.6	96	345.6	46	1.6	96	3.4
47	169.2	97	349.2	47	1.7	97	3.5
48	172.8	98	352.8	48	1.7	98	3.5
49	176.4	99	356.4	49	1.7	99	3.5
50	180.0	100	360.0	50	1.8	100	3.6



3.7 PER CENT TEST.

MILK.	FAT.	MILK.	FAT.	MILK.	FAT.	MILK.	FAT.
1	3.7	51	188.7	1	.....	51	1.9
2	7.4	52	192.4	2	.1	52	1.9
3	11.1	53	196.1	3	.1	53	1.9
4	14.8	54	199.8	4	.1	54	2.0
5	18.5	55	203.5	5	.2	55	2.0
6	22.2	56	207.2	6	.2	56	2.1
7	25.9	57	210.9	7	.2	57	2.1
8	29.6	58	214.6	8	.3	58	2.1
9	33.3	59	218.3	9	.3	59	2.2
10	37.0	60	222.0	10	.4	60	2.2
11	40.7	61	225.7	11	.4	61	2.2
12	44.4	62	229.4	12	.4	62	2.3
13	48.1	63	233.1	13	.5	63	2.3
14	51.8	64	236.8	14	.5	64	2.3
15	55.5	65	240.5	15	.5	65	2.4
16	59.2	66	244.2	16	.6	66	2.4
17	62.9	67	247.9	17	.6	67	2.5
18	66.6	68	251.6	18	.6	68	2.5
19	70.3	69	255.3	19	.7	69	2.5
20	74.0	70	259.0	20	.7	70	2.6
21	77.7	71	262.7	21	.8	71	2.6
22	81.4	72	266.4	22	.8	72	2.6
23	85.1	73	270.1	23	.8	73	2.7
24	88.8	74	273.8	24	.9	74	2.7
25	92.5	75	277.5	25	.9	75	2.8
26	96.2	76	281.2	26	.9	76	2.8
27	99.9	77	284.9	27	1.0	77	2.8
28	103.6	78	288.6	28	1.0	78	2.9
29	107.3	79	292.3	29	1.1	79	2.9
30	111.0	80	296.0	30	1.1	80	2.9
31	114.7	81	299.7	31	1.1	81	3.0
32	118.4	82	303.4	32	1.2	82	3.0
33	122.1	83	307.1	33	1.2	83	3.1
34	125.8	84	310.8	34	1.2	84	3.1
35	129.5	85	314.5	35	1.3	85	3.1
36	133.2	86	318.2	36	1.3	86	3.2
37	136.9	87	321.9	37	1.3	87	3.2
38	140.6	88	325.6	38	1.4	88	3.2
39	144.3	89	329.3	39	1.4	89	3.3
40	148.0	90	333.0	40	1.5	90	3.3
41	151.7	91	336.7	41	1.5	91	3.3
42	155.4	92	340.4	42	1.5	92	3.4
43	159.1	93	344.1	43	1.6	93	3.4
44	162.8	94	347.8	44	1.6	94	3.5
45	166.5	95	351.5	45	1.6	95	3.5
46	170.2	96	355.2	46	1.7	96	3.5
47	173.9	97	358.9	47	1.7	97	3.6
48	177.6	98	362.6	48	1.8	98	3.6
49	181.3	99	366.3	49	1.8	99	3.6
50	185.0	100	370.0	50	1.8	100	3.7

## 3.8 PER CENT. TEST

MILK.	FAT.	MILK.	FAT.	MILK.	FAT.	MILK.	FAT.
1	3.8	51	193.8	1	.....	51	1.9
2	7.6	52	197.6	2	.1	52	2.0
3	11.4	53	201.4	3	.1	53	2.0
4	15.2	54	205.2	4	.1	54	2.0
5	19.0	55	209.0	5	.2	55	2.1
6	22.8	56	212.8	6	.2	56	2.1
7	26.6	57	216.6	7	.2	57	2.1
8	30.4	58	220.4	8	.3	58	2.2
9	34.2	59	224.2	9	.3	59	2.2
<b>10</b>	<b>38.0</b>	<b>60</b>	<b>228.0</b>	<b>10</b>	<b>.4</b>	<b>60</b>	<b>2.3</b>
11	41.8	61	231.8	11	.4	61	2.3
12	45.6	62	235.6	12	.4	62	2.3
13	49.4	63	239.4	13	.5	63	2.4
14	53.2	64	243.2	14	.5	64	2.4
15	57.0	65	247.0	15	.6	65	2.5
16	60.8	66	250.8	16	.6	66	2.5
17	64.6	67	254.6	17	.6	67	2.5
18	68.4	68	258.4	18	.7	68	2.6
19	72.2	69	262.2	19	.7	69	2.6
<b>20</b>	<b>76.0</b>	<b>70</b>	<b>266.0</b>	<b>20</b>	<b>.7</b>	<b>70</b>	<b>2.6</b>
21	79.8	71	269.8	21	.8	71	2.7
22	83.6	72	273.6	22	.8	72	2.7
23	87.4	73	277.4	23	.9	73	2.8
24	91.2	74	281.2	24	.9	74	2.8
25	95.0	75	285.0	25	.9	75	2.8
26	98.8	76	288.8	26	1.0	76	2.9
27	102.6	77	292.6	27	1.0	77	2.9
28	106.4	78	296.4	28	1.0	78	2.9
29	110.2	79	300.2	29	1.1	79	3.0
<b>30</b>	<b>114.0</b>	<b>80</b>	<b>304.0</b>	<b>30</b>	<b>1.1</b>	<b>80</b>	<b>3.0</b>
31	117.8	81	307.8	31	1.2	81	3.1
32	121.6	82	311.6	32	1.2	82	3.1
33	125.4	83	315.4	33	1.2	83	3.1
34	129.2	84	319.2	34	1.3	84	3.2
35	133.0	85	323.0	35	1.3	85	3.2
36	136.8	86	326.8	36	1.3	86	3.2
37	140.6	87	330.6	37	1.4	87	3.3
38	144.4	88	334.4	38	1.4	88	3.3
39	148.2	89	338.2	39	1.5	89	3.4
<b>40</b>	<b>152.0</b>	<b>90</b>	<b>342.0</b>	<b>40</b>	<b>1.5</b>	<b>90</b>	<b>3.4</b>
41	155.8	91	345.8	41	1.5	91	3.4
42	159.6	92	349.6	42	1.6	92	3.5
43	163.4	93	353.4	43	1.6	93	3.5
44	167.2	94	357.2	44	1.7	94	3.6
45	171.0	95	361.0	45	1.7	95	3.6
46	174.8	96	364.8	46	1.7	96	3.6
47	178.6	97	368.6	47	1.8	97	3.7
48	182.4	98	372.4	48	1.8	98	3.7
49	186.2	99	376.2	49	1.8	99	3.7
<b>50</b>	<b>190.0</b>	<b>100</b>	<b>380.0</b>	<b>50</b>	<b>1.9</b>	<b>100</b>	<b>3.8</b>

3.9 PER CENT. TEST

MILK.	FAT.	MILK.	FAT.	MILK.	FAT.	MILK.	FAT.
1	3.9	51	198.9	1	.....	51	2.0
2	7.8	52	202.8	2	.1	52	2.0
3	11.7	53	206.7	3	.1	53	2.0
4	15.6	54	210.6	4	.1	54	2.1
5	19.5	55	214.5	5	.2	55	2.1
6	23.4	56	218.4	6	.2	56	2.2
7	27.3	57	222.3	7	.3	57	2.2
8	31.2	58	226.2	8	.3	58	2.2
9	35.1	59	230.1	9	.3	59	2.3
10	39.0	60	234.0	10	.4	60	2.3
11	42.9	61	237.9	11	.4	61	2.4
12	46.8	62	241.8	12	.5	62	2.4
13	50.7	63	245.7	13	.5	63	2.4
14	54.6	64	249.6	14	.5	64	2.5
15	58.5	65	253.5	15	.6	65	2.5
16	62.4	66	257.4	16	.6	66	2.6
17	66.3	67	261.3	17	.6	67	2.6
18	70.2	68	265.2	18	.7	68	2.6
19	74.1	69	269.1	19	.7	69	2.7
20	78.0	70	273.0	20	.8	70	2.7
21	81.9	71	276.9	21	.8	71	2.7
22	85.8	72	280.8	22	.8	72	2.8
23	89.7	73	284.7	23	.9	73	2.8
24	93.6	74	288.6	24	.9	74	2.9
25	97.5	75	292.5	25	1.0	75	2.9
26	101.4	76	296.4	26	1.0	76	2.9
27	105.3	77	300.3	27	1.0	77	3.0
28	109.2	78	304.2	28	1.1	78	3.0
29	113.1	79	308.1	29	1.1	79	3.1
30	117.0	80	312.0	30	1.2	80	3.1
31	120.9	81	315.9	31	1.2	81	3.1
32	124.8	82	319.8	32	1.2	82	3.2
33	128.7	83	323.7	33	1.3	83	3.2
34	132.6	84	327.6	34	1.3	84	3.3
35	136.5	85	331.5	35	1.3	85	3.3
36	140.4	86	335.4	36	1.4	86	3.3
37	144.3	87	339.3	37	1.4	87	3.4
38	148.2	88	343.2	38	1.5	88	3.4
39	152.1	89	347.1	39	1.5	89	3.5
40	156.0	90	351.0	40	1.5	90	3.5
41	159.9	91	354.9	41	1.6	91	3.5
42	163.8	92	358.8	42	1.6	92	3.6
43	167.7	93	362.7	43	1.7	93	3.6
44	171.6	94	366.6	44	1.7	94	3.6
45	175.5	95	370.5	45	1.7	95	3.7
46	179.4	96	374.4	46	1.8	96	3.7
47	183.3	97	378.3	47	1.8	97	3.8
48	187.2	98	382.2	48	1.9	98	3.8
49	191.1	99	386.1	49	1.9	99	3.8
50	195.0	100	390.0	50	1.9	100	3.9

## 4.0 PER CENT TEST

MILK.	FAT.	MILK.	FAT.	MILK.	FAT.	MILK.	FAT.
1	4.0	51	204.0	1	.....	51	2.0
2	8.0	52	208.0	2	.1	52	2.1
3	12.0	53	212.0	3	.1	53	2.1
4	16.0	54	216.0	4	.1	54	2.1
5	20.0	55	220.0	5	.2	55	2.2
6	24.0	56	224.0	6	.2	56	2.2
7	28.0	57	228.0	7	.3	57	2.3
8	32.0	58	232.0	8	.3	58	2.3
9	36.0	59	236.0	9	.3	59	2.3
<b>10</b>	<b>40.0</b>	<b>60</b>	<b>240.0</b>	<b>10</b>	<b>.4</b>	<b>60</b>	<b>2.4</b>
11	44.0	61	244.0	11	.4	61	2.4
12	48.0	62	248.0	12	.5	62	2.5
13	52.0	63	252.0	13	.5	63	2.5
14	56.0	64	256.0	14	.5	64	2.5
15	60.0	65	260.0	15	.6	65	2.6
16	64.0	66	264.0	16	.6	66	2.6
17	68.0	67	268.0	17	.7	67	2.7
18	72.0	68	272.0	18	.7	68	2.7
19	76.0	69	276.0	19	.7	69	2.7
<b>20</b>	<b>80.0</b>	<b>70</b>	<b>280.0</b>	<b>20</b>	<b>.8</b>	<b>70</b>	<b>2.8</b>
21	84.0	71	284.0	21	.8	71	2.8
22	88.0	72	288.0	22	.9	72	2.9
23	92.0	73	292.0	23	.9	73	2.9
24	86.0	74	296.0	24	.9	74	2.9
25	100.0	75	300.0	25	1.0	75	3.0
26	104.0	76	304.0	26	1.0	76	3.0
27	108.0	77	308.0	27	1.1	77	3.1
28	112.0	78	312.0	28	1.1	78	3.1
29	116.0	79	316.0	29	1.1	79	3.1
<b>30</b>	<b>120.0</b>	<b>80</b>	<b>320.0</b>	<b>30</b>	<b>1.2</b>	<b>80</b>	<b>3.2</b>
31	124.0	81	324.0	31	1.2	81	3.2
32	128.0	82	328.0	32	1.3	82	3.3
33	132.0	83	332.0	33	1.3	83	3.3
34	136.0	84	336.0	34	1.3	84	3.3
35	140.0	85	340.0	35	1.4	85	3.4
36	144.0	86	344.0	36	1.4	86	3.4
37	148.0	87	348.0	37	1.5	87	3.5
38	152.0	88	352.0	38	1.5	88	3.5
39	156.0	89	356.0	39	1.5	89	3.5
<b>40</b>	<b>160.0</b>	<b>90</b>	<b>360.0</b>	<b>40</b>	<b>1.6</b>	<b>90</b>	<b>3.6</b>
41	164.0	91	364.0	41	1.6	91	3.6
42	168.0	92	368.0	42	1.7	92	3.7
43	172.0	93	372.0	43	1.7	93	3.7
44	176.0	94	376.0	44	1.7	94	3.7
45	180.0	95	380.0	45	1.8	95	3.8
46	184.0	96	384.0	46	1.8	96	3.8
47	188.0	97	388.0	47	1.9	97	3.9
48	192.0	98	392.0	48	1.9	98	3.9
49	196.0	99	396.0	49	1.9	99	3.9
<b>50</b>	<b>200.0</b>	<b>100</b>	<b>400.0</b>	<b>50</b>	<b>2.0</b>	<b>100</b>	<b>4.0</b>

## 4.1 PER CENT. TEST.

41

MILK.	FAT.	MILK.	FAT.	MILK.	FAT.	MILK.	FAT.
1	4.1	51	209.1	1	.....	51	2.1
2	8.2	52	213.2	2	.1	52	2.1
3	12.3	53	217.3	3	.1	53	2.2
4	16.4	54	221.4	4	.1	54	2.2
5	20.5	55	225.5	5	.2	55	2.2
6	24.6	56	229.6	6	.2	56	2.3
7	28.7	57	233.7	7	.3	57	2.3
8	32.8	58	237.8	8	.3	58	2.4
9	36.9	59	241.9	9	.3	59	2.4
10	41.0	60	246.0	10	.4	60	2.4
11	45.1	61	250.1	11	.4	61	2.5
12	49.2	62	254.2	12	.5	62	2.5
13	53.3	63	258.3	13	.5	63	2.6
14	57.4	64	262.4	14	.6	64	2.6
15	61.5	65	266.5	15	.6	65	2.6
16	65.6	66	270.6	16	.6	66	2.7
17	69.7	67	274.7	17	.7	67	2.7
18	73.8	68	278.8	18	.7	68	2.8
19	77.9	69	282.9	19	.8	69	2.8
20	82.0	70	287.0	20	.8	70	2.9
21	86.1	71	291.1	21	.8	71	2.9
22	90.2	72	295.2	22	.9	72	2.9
23	94.3	73	299.3	23	.9	73	3.0
24	98.4	74	303.4	24	1.0	74	3.0
25	102.5	75	307.5	25	1.0	75	3.1
26	106.6	76	311.6	26	1.0	76	3.1
27	110.7	77	315.7	27	1.1	77	3.1
28	114.8	78	319.8	28	1.1	78	3.2
29	118.9	79	323.9	29	1.2	79	3.2
30	123.0	80	328.0	30	1.2	80	3.3
31	127.1	81	332.1	31	1.3	81	3.3
32	131.2	82	336.2	32	1.3	82	3.3
33	135.3	83	340.3	33	1.3	83	3.4
34	139.4	84	344.4	34	1.4	84	3.4
35	143.5	85	348.5	35	1.4	85	3.5
36	147.6	86	352.6	36	1.5	86	3.5
37	151.7	87	356.7	37	1.5	87	3.5
38	155.8	88	360.8	38	1.5	88	3.6
39	159.9	89	364.9	39	1.6	89	3.6
40	164.0	90	369.0	40	1.6	90	3.7
41	168.1	91	373.1	41	1.7	91	3.7
42	172.2	92	377.2	42	1.7	92	3.8
43	176.3	93	381.3	43	1.7	93	3.8
44	180.4	94	385.4	44	1.8	94	3.8
45	184.5	95	389.5	45	1.8	95	3.9
46	188.6	96	393.6	46	1.9	96	3.9
47	192.7	97	397.7	47	1.9	97	4.0
48	196.8	98	401.8	48	1.9	98	4.0
49	200.9	99	405.9	49	2.0	99	4.0
50	205.0	100	410.0	50	2.0	100	4.1

## 4.2 PER CENT. TEST

MILK.	FAT.	MILK.	FAT.	MILK.	FAT.	MILK.	FAT.
1	4.2	51	214.2	1	.....	51	2.1
2	8.4	52	218.4	2	.1	52	2.2
3	12.6	53	222.6	3	.1	53	2.2
4	16.8	54	226.8	4	.1	54	2.2
5	21.0	55	231.0	5	.2	55	2.3
6	25.2	56	235.2	6	.2	56	2.3
7	29.4	57	239.4	7	.3	57	2.4
8	33.6	58	243.6	8	.3	58	2.4
9	37.8	59	247.8	9	.4	59	2.5
10	42.0	60	252.0	10	.4	60	2.5
11	46.2	61	256.2	11	.4	61	2.5
12	50.4	62	260.4	12	.5	62	2.6
13	54.6	63	264.6	13	.5	63	2.6
14	58.8	64	268.8	14	.6	64	2.7
15	63.0	65	273.0	15	.6	65	2.7
16	67.2	66	277.2	16	.6	66	2.8
17	71.4	67	281.4	17	.7	67	2.8
18	75.6	68	285.6	18	.7	68	2.8
19	79.8	69	289.8	19	.8	69	2.9
20	84.0	70	294.0	20	.8	70	2.9
21	88.2	71	298.2	21	.9	71	3.0
22	92.4	72	302.4	22	.9	72	3.0
23	96.6	73	306.6	23	.9	73	3.0
24	100.8	74	310.8	24	1.0	74	3.1
25	105.0	75	315.0	25	1.0	75	3.1
26	109.2	76	319.2	26	1.1	76	3.2
27	113.4	77	323.4	27	1.1	77	3.2
28	117.6	78	327.6	28	1.2	78	3.3
29	121.8	79	331.8	29	1.2	79	3.3
30	126.0	80	336.0	30	1.2	80	3.3
31	130.2	81	340.2	31	1.3	81	3.4
32	134.4	82	344.4	32	1.3	82	3.4
33	138.6	83	348.6	33	1.4	83	3.5
34	142.8	84	352.8	34	1.4	84	3.5
35	147.0	85	357.0	35	1.5	85	3.6
36	151.2	86	361.2	36	1.5	86	3.6
37	155.4	87	365.4	37	1.5	87	3.6
38	159.6	88	369.6	38	1.6	88	3.7
39	163.8	89	373.8	39	1.6	89	3.7
40	168.0	90	378.0	40	1.7	90	3.8
41	172.2	91	382.2	41	1.7	91	3.8
42	176.4	92	386.4	42	1.7	92	3.8
43	180.6	93	390.6	43	1.8	93	3.9
44	184.8	94	394.8	44	1.8	94	3.9
45	189.0	95	399.0	45	1.9	95	4.0
46	193.2	96	403.2	46	1.9	96	4.0
47	197.4	97	407.4	47	2.0	97	4.1
48	201.6	98	411.6	48	2.0	98	4.1
49	205.8	99	415.8	49	2.0	99	4.1
50	210.0	100	420.0	50	2.1	100	4.2

## 4.3 PER CENT TEST.

43

MILK.	FAT.	MILK.	FAT.	MILK.	FAT.	MILK.	FAT.
1	4.3	51	219.3	1	.....	51	2.2
2	8.6	52	223.6	2	.1	52	2.2
3	12.9	53	227.9	3	.1	53	2.3
4	17.2	54	232.2	4	.2	54	2.3
5	21.5	55	236.5	5	.2	55	2.3
6	25.8	56	240.8	6	.2	56	2.4
7	30.1	57	245.1	7	.3	57	2.4
8	34.4	58	249.4	8	.3	58	2.5
9	38.7	59	253.7	9	.4	59	2.5
10	43.0	60	258.0	10	.4	60	2.6
11	47.3	61	262.3	11	.5	61	2.6
12	51.6	62	266.6	12	.5	62	2.6
13	55.9	63	270.9	13	.5	63	2.7
14	60.2	64	275.2	14	.6	64	2.7
15	64.5	65	279.5	15	.6	65	2.8
16	68.8	66	283.8	16	.7	66	2.8
17	73.1	67	288.1	17	.7	67	2.9
18	77.4	68	292.4	18	.8	68	2.9
19	81.7	69	296.7	19	.8	69	2.9
20	86.0	70	301.0	20	.8	70	3.0
21	90.3	71	305.3	21	.9	71	3.0
22	94.6	72	309.6	22	.9	72	3.1
23	98.9	73	313.9	23	1.0	73	3.1
24	103.2	74	318.2	24	1.0	74	3.2
25	107.5	75	322.5	25	1.1	75	3.2
26	111.8	76	326.8	26	1.1	76	3.2
27	116.1	77	331.1	27	1.1	77	3.3
28	120.4	78	335.4	28	1.2	78	3.3
29	124.7	79	339.7	29	1.2	79	3.4
30	129.0	80	344.0	30	1.3	80	3.4
31	133.3	81	348.3	31	1.3	81	3.5
32	137.6	82	352.6	32	1.4	82	3.5
33	141.9	83	356.9	33	1.4	83	3.5
34	146.2	84	361.2	34	1.4	84	3.6
35	150.5	85	365.5	35	1.5	85	3.6
36	154.8	86	369.8	36	1.5	86	3.7
37	159.1	87	374.1	37	1.6	87	3.7
38	163.4	88	378.4	38	1.6	88	3.8
39	167.7	89	382.7	39	1.7	89	3.8
40	172.0	90	387.0	40	1.7	90	3.9
41	176.3	91	391.3	41	1.7	91	3.9
42	180.6	92	395.6	42	1.8	92	3.9
43	184.9	93	399.9	43	1.8	93	4.0
44	189.2	94	404.2	44	1.9	94	4.0
45	193.5	95	408.5	45	1.9	95	4.1
46	197.8	96	412.8	46	2.0	96	4.1
47	202.1	97	417.1	47	2.0	97	4.2
48	206.4	98	421.4	48	2.0	98	4.2
49	210.7	99	425.7	49	2.1	99	4.2
50	215.0	100	430.0	50	2.1	100	4.3

## 4.4 PER CENT. TEST.

MILK.	FAT.	MILK.	FAT.	MILK.	FAT.	MILK.	FAT.
1	4.4	51	224.4	1	.....	51	2.2
2	8.8	52	228.8	2	.1	52	2.3
3	13.2	53	233.2	3	.1	53	2.3
4	17.6	54	237.6	4	.2	54	2.4
5	22.0	55	242.0	5	.2	55	2.4
6	26.4	56	246.4	6	.2	56	2.4
7	30.8	57	250.8	7	.3	57	2.5
8	35.2	58	255.2	8	.3	58	2.5
9	39.6	59	259.6	9	.4	59	2.6
10	44.0	60	264.0	10	.4	60	2.6
11	48.4	61	268.4	11	.5	61	2.7
12	52.8	62	272.8	12	.5	62	2.7
13	57.2	63	277.2	13	.6	63	2.8
14	61.6	64	281.6	14	.6	64	2.8
15	66.0	65	286.0	15	.6	65	2.8
16	70.4	66	290.4	16	.7	66	2.9
17	74.8	67	294.8	17	.7	67	2.9
18	79.2	68	299.2	18	.8	68	3.0
19	83.6	69	303.6	19	.8	69	3.0
20	88.0	70	308.0	20	.9	70	3.1
21	92.4	71	312.4	21	.9	71	3.1
22	96.8	72	316.8	22	.9	72	3.1
23	101.2	73	321.2	23	1.0	73	3.2
24	105.6	74	325.6	24	1.0	74	3.2
25	110.0	75	330.0	25	1.1	75	3.3
26	114.4	76	334.4	26	1.1	76	3.3
27	118.8	77	338.8	27	1.2	77	3.4
28	123.2	78	343.2	28	1.2	78	3.4
29	127.6	79	347.6	29	1.3	79	3.5
30	132.0	80	352.0	30	1.3	80	3.5
31	136.4	81	356.4	31	1.3	81	3.5
32	140.8	82	360.8	32	1.4	82	3.6
33	145.2	83	365.2	33	1.4	83	3.6
34	149.6	84	369.6	34	1.5	84	3.7
35	154.0	85	374.0	35	1.5	85	3.7
36	158.4	86	378.4	36	1.6	86	3.8
37	162.8	87	382.8	37	1.6	87	3.8
38	167.2	88	387.2	38	1.7	88	3.9
39	171.6	89	391.6	39	1.7	89	3.9
40	176.0	90	396.0	40	1.7	90	3.9
41	180.4	91	400.4	41	1.8	91	4.0
42	184.8	92	404.8	42	1.8	92	4.0
43	189.2	93	409.2	43	1.9	93	4.1
44	193.6	94	413.6	44	1.9	94	4.1
45	198.0	95	418.0	45	2.0	95	4.2
46	202.4	96	422.4	46	2.0	96	4.2
47	206.8	97	426.8	47	2.0	97	4.2
48	211.2	98	431.2	48	2.1	98	4.3
49	215.6	99	435.6	49	2.1	99	4.3
50	220.0	100	440.0	50	2.2	100	4.4



4.5 PER CENT. TEST.

MILK.	FAT.	MILK.	FAT.	MILK.	FAT.	MILK.	FAT.
1	4.5	51	229.5	1	.....	51	2.3
2	9.0	52	234.0	2	.1	52	2.3
3	13.5	53	238.5	3	.1	53	2.4
4	18.0	54	243.0	4	.2	54	2.4
5	22.5	55	247.5	5	.2	55	2.5
6	27.0	56	252.0	6	.3	56	2.5
7	31.5	57	256.5	7	.3	57	2.5
8	36.0	58	261.0	8	.3	58	2.6
9	40.5	59	265.5	9	.4	59	2.6
10	45.0	60	270.0	10	.4	60	2.7
11	49.5	61	274.5	11	.5	61	2.7
12	54.0	62	279.0	12	.5	62	2.8
13	58.5	63	283.5	13	.6	63	2.8
14	63.0	64	288.0	14	.6	64	2.9
15	67.5	65	292.5	15	.7	65	2.9
16	72.0	66	297.0	16	.7	66	3.0
17	76.5	67	301.5	17	.7	67	3.0
18	81.0	68	306.0	18	.8	68	3.0
19	85.5	69	310.5	19	.8	69	3.1
20	90.0	70	315.0	20	.9	70	3.1
21	94.5	71	319.5	21	.9	71	3.2
22	99.0	72	324.0	22	1.0	72	3.2
23	103.5	73	328.5	23	1.0	73	3.3
24	108.0	74	333.0	24	1.1	74	3.3
25	112.5	75	337.5	25	1.1	75	3.4
26	117.0	76	342.0	26	1.2	76	3.4
27	121.5	77	346.5	27	1.2	77	3.4
28	126.0	78	351.0	28	1.2	78	3.5
29	130.5	79	355.5	29	1.3	79	3.5
30	135.0	80	360.0	30	1.3	80	3.6
31	139.5	81	364.5	31	1.4	81	3.6
32	144.0	82	369.0	32	1.4	82	3.7
33	148.5	83	373.5	33	1.5	83	3.7
34	153.0	84	378.0	34	1.5	84	3.8
35	157.5	85	382.5	35	1.6	85	3.8
36	162.0	86	387.0	36	1.6	86	3.9
37	166.5	87	391.5	37	1.6	87	3.9
38	171.0	88	396.0	38	1.7	88	3.9
39	175.5	89	400.5	39	1.7	89	4.0
40	180.0	90	405.0	40	1.8	90	4.0
41	184.5	91	409.5	41	1.8	91	4.1
42	189.0	92	414.0	42	1.9	92	4.1
43	193.5	93	418.5	43	1.9	93	4.2
44	198.0	94	423.0	44	2.0	94	4.2
45	202.5	95	427.5	45	2.0	95	4.3
46	207.0	96	432.0	46	2.1	96	4.3
47	211.5	97	436.5	47	2.1	97	4.3
48	216.0	98	441.0	48	2.1	98	4.4
49	220.5	99	445.5	49	2.2	99	4.4
50	225.0	100	450.0	50	2.2	100	4.5

## 4.6 PER CENT. TEST.

MILK.	FAT.	MILK.	FAT.	MILK.	FAT.	MILK.	FAT.
1	4.6	51	234.6	1	.....	51	2.3
2	9.2	52	239.2	2	.1	52	2.4
3	13.8	53	243.8	3	.1	53	2.4
4	18.4	54	248.4	4	.2	54	2.5
5	23.0	55	253.0	5	.2	55	2.5
6	27.6	56	257.6	6	.3	56	2.6
7	32.2	57	262.2	7	.3	57	2.6
8	36.8	58	266.8	8	.3	58	2.6
9	41.4	59	271.4	9	.4	59	2.7
<b>10</b>	<b>46.0</b>	<b>60</b>	<b>276.0</b>	<b>10</b>	<b>.4</b>	<b>60</b>	<b>2.7</b>
11	50.6	61	280.6	11	.5	61	2.8
12	55.2	62	285.2	12	.5	62	2.8
13	59.8	63	289.8	13	.6	63	2.9
14	64.4	64	294.4	14	.6	64	2.9
15	69.0	65	299.0	15	.7	65	3.0
16	73.6	66	303.6	16	.7	66	3.0
17	78.2	67	308.2	17	.8	67	3.1
18	82.8	68	312.8	18	.8	68	3.1
19	87.4	69	317.4	19	.9	69	3.2
<b>20</b>	<b>92.0</b>	<b>70</b>	<b>322.0</b>	<b>20</b>	<b>.9</b>	<b>70</b>	<b>3.2</b>
21	96.6	71	326.6	21	.9	71	3.2
22	101.2	72	331.2	22	1.0	72	3.3
23	105.8	73	335.8	23	1.0	73	3.3
24	110.4	74	340.4	24	1.1	74	3.4
25	115.0	75	345.0	25	1.1	75	3.4
26	119.6	76	349.6	26	1.2	76	3.5
27	124.2	77	354.2	27	1.2	77	3.5
28	128.8	78	358.8	28	1.3	78	3.6
29	133.4	79	363.4	29	1.3	79	3.6
<b>30</b>	<b>138.0</b>	<b>80</b>	<b>368.0</b>	<b>30</b>	<b>1.4</b>	<b>80</b>	<b>3.7</b>
31	142.6	81	372.6	31	1.4	81	3.7
32	147.2	82	377.2	32	1.5	82	3.8
33	151.8	83	381.8	33	1.5	83	3.8
34	156.4	84	386.4	34	1.5	84	3.8
35	161.0	85	391.0	35	1.6	85	3.9
36	165.6	86	395.6	36	1.6	86	3.9
37	170.2	87	400.2	37	1.7	87	4.0
38	174.8	88	404.8	38	1.7	88	4.0
39	179.4	89	409.4	39	1.8	89	4.1
<b>40</b>	<b>184.0</b>	<b>90</b>	<b>414.0</b>	<b>40</b>	<b>1.8</b>	<b>90</b>	<b>4.1</b>
41	188.6	91	418.6	41	1.9	91	4.2
42	193.2	92	423.2	42	1.9	92	4.2
43	197.8	93	427.8	43	2.0	93	4.3
44	202.4	94	432.4	44	2.0	94	4.3
45	207.0	95	437.0	45	2.1	95	4.4
46	211.6	96	441.6	46	2.1	96	4.4
47	216.2	97	446.2	47	2.1	97	4.4
48	220.8	98	450.8	48	2.2	98	4.5
49	225.4	99	455.4	49	2.2	99	4.5
<b>50</b>	<b>230.0</b>	<b>100</b>	<b>460.0</b>	<b>50</b>	<b>2.3</b>	<b>100</b>	<b>4.6</b>

4.7 PER CENT TEST

MILK.	FAT.	MILK.	FAT.	MILK.	FAT.	MILK.	FAT.
1	4.7	51	239.7	1	.....	51	2.4
2	9.4	52	244.4	2	.1	52	2.4
3	14.1	53	249.1	3	.1	53	2.5
4	18.8	54	253.8	4	.2	54	2.5
5	23.5	55	258.5	5	.2	55	2.6
6	28.2	56	263.2	6	.3	56	2.6
7	32.9	57	267.9	7	.3	57	2.7
8	37.6	58	272.6	8	.4	58	2.7
9	42.3	59	277.3	9	.4	59	2.8
10	47.0	60	282.0	10	.5	60	2.8
11	51.7	61	286.7	11	.5	61	2.8
12	56.4	62	291.4	12	.5	62	2.9
13	61.1	63	296.1	13	.6	63	2.9
14	65.8	64	300.8	14	.6	64	3.0
15	70.5	65	305.5	15	.7	65	3.0
16	75.2	66	310.2	16	.7	66	3.1
17	79.9	67	314.9	17	.8	67	3.1
18	84.6	68	319.6	18	.8	68	3.2
19	89.3	69	324.3	19	.9	69	3.2
20	94.0	70	329.0	20	.9	70	3.3
21	98.7	71	333.7	21	1.0	71	3.3
22	103.4	72	338.4	22	1.0	72	3.4
23	108.1	73	343.1	23	1.1	73	3.4
24	112.8	74	347.8	24	1.1	74	3.5
25	117.5	75	352.5	25	1.2	75	3.5
26	122.2	76	357.2	26	1.2	76	3.6
27	126.9	77	361.9	27	1.2	77	3.6
28	131.6	78	366.6	28	1.3	78	3.6
29	136.3	79	371.3	29	1.3	79	3.7
30	141.0	80	376.0	30	1.4	80	3.7
31	145.7	81	380.7	31	1.4	81	3.8
32	150.4	82	385.4	32	1.5	82	3.8
33	155.1	83	390.1	33	1.5	83	3.9
34	159.8	84	394.8	34	1.6	84	3.9
35	164.5	85	399.5	35	1.6	85	4.0
36	169.2	86	404.2	36	1.7	86	4.0
37	173.9	87	408.9	37	1.7	87	4.1
38	178.6	88	413.6	38	1.8	88	4.1
39	183.3	89	418.3	39	1.8	89	4.2
40	188.0	90	423.0	40	1.9	90	4.2
41	192.7	91	427.7	41	1.9	91	4.3
42	197.4	92	432.4	42	2.0	92	4.3
43	202.1	93	437.1	43	2.0	93	4.4
44	206.8	94	441.8	44	2.0	94	4.4
45	211.5	95	446.5	45	2.1	95	4.4
46	216.2	96	451.2	46	2.1	96	4.5
47	220.9	97	455.9	47	2.2	97	4.5
48	225.6	98	460.6	48	2.2	98	4.6
49	230.3	99	465.3	49	2.3	99	4.6
50	235.0	100	470.0	50	2.3	100	4.7

## 4.8 PER CENT. TEST.

MILK.	FAT.	MILK.	FAT.	MILK.	FAT.	MILK.	FAT.
1	4.8	51	244.8	1	.....	51	2.4
2	9.6	52	249.6	2	.1	52	2.5
3	14.4	53	254.4	3	.1	53	2.5
4	19.2	54	259.2	4	.2	54	2.6
5	24.0	55	264.0	5	.2	55	2.6
6	28.8	56	268.8	6	.3	56	2.7
7	33.6	57	273.6	7	.3	57	2.7
8	38.4	58	278.4	8	.4	58	2.8
9	43.2	59	283.2	9	.4	59	2.8
10	48.0	60	288.0	10	.5	60	2.9
11	52.8	61	292.8	11	.5	61	2.9
12	57.6	62	297.6	12	.6	62	3.0
13	62.4	63	302.4	13	.6	63	3.0
14	67.2	64	307.2	14	.7	64	3.1
15	72.0	65	312.0	15	.7	65	3.1
16	76.8	66	316.8	16	.7	66	3.1
17	81.6	67	321.6	17	.8	67	3.2
18	86.4	68	326.4	18	.8	68	3.2
19	91.2	69	331.2	19	.9	69	3.3
20	96.0	70	336.0	20	.9	70	3.3
21	100.8	71	340.8	21	1.0	71	3.4
22	105.6	72	345.6	22	1.0	72	3.4
23	110.4	73	350.4	23	1.1	73	3.5
24	115.2	74	355.2	24	1.1	74	3.5
25	120.0	75	360.0	25	1.2	75	3.6
26	124.8	76	364.8	26	1.2	76	3.6
27	129.6	77	369.6	27	1.3	77	3.7
28	134.4	78	374.4	28	1.3	78	3.7
29	139.2	79	379.2	29	1.4	79	3.8
30	144.0	80	384.0	30	1.4	80	3.8
31	148.8	81	388.8	31	1.5	81	3.9
32	153.6	82	393.6	32	1.5	82	3.9
33	158.4	83	398.4	33	1.6	83	4.0
34	163.2	84	403.2	34	1.6	84	4.0
35	168.0	85	408.0	35	1.7	85	4.1
36	172.8	86	412.8	36	1.7	86	4.1
37	177.6	87	417.6	37	1.8	87	4.2
38	182.4	88	422.4	38	1.8	88	4.2
39	187.2	89	427.2	39	1.9	89	4.3
40	192.0	90	432.0	40	1.9	90	4.3
41	196.8	91	436.8	41	1.9	91	4.3
42	201.6	92	441.6	42	2.0	92	4.4
43	206.4	93	446.4	43	2.0	93	4.4
44	211.2	94	451.2	44	2.1	94	4.5
45	216.0	95	456.0	45	2.1	95	4.5
46	220.8	96	460.8	46	2.2	96	4.6
47	225.6	97	465.6	47	2.2	97	4.6
48	230.4	98	470.4	48	2.3	98	4.7
49	235.2	99	475.2	49	2.3	99	4.7
50	240.0	100	480.0	50	2.4	100	4.8

4.9 PER CENT TEST.

MILK.	FAT.	MILK.	FAT.	MILK.	FAT.	MILK.	FAT.
1	4.9	51	249.9	1	.....	51	2.5
2	9.8	52	254.8	2	.1	52	2.5
3	14.7	53	259.7	3	.1	53	2.6
4	19.6	54	264.6	4	.2	54	2.6
5	24.5	55	269.5	5	.2	55	2.7
6	29.4	56	274.4	6	.3	56	2.7
7	34.3	57	279.3	7	.3	57	2.8
8	39.2	58	284.2	8	.4	58	2.8
9	44.1	59	289.1	9	.4	59	2.9
<b>10</b>	<b>49.0</b>	<b>60</b>	<b>294.0</b>	<b>10</b>	<b>.5</b>	<b>60</b>	<b>2.9</b>
11	53.9	61	298.9	11	.5	61	3.0
12	58.8	62	303.8	12	.6	62	3.0
13	63.7	63	308.7	13	.6	63	3.1
14	68.6	64	313.6	14	.7	64	3.1
15	73.5	65	318.5	15	.7	65	3.2
16	78.4	66	323.4	16	.8	66	3.2
17	83.3	67	328.3	17	.8	67	3.3
18	88.2	68	333.2	18	.9	68	3.3
19	93.1	69	338.1	19	.9	69	3.4
<b>20</b>	<b>98.0</b>	<b>70</b>	<b>343.0</b>	<b>20</b>	<b>1.0</b>	<b>70</b>	<b>3.4</b>
21	102.9	71	347.9	21	1.0	71	3.5
22	107.8	72	352.8	22	1.1	72	3.5
23	112.7	73	357.7	23	1.1	73	3.6
24	117.6	74	362.6	24	1.2	74	3.6
25	122.5	75	367.5	25	1.2	75	3.7
26	127.4	76	372.4	26	1.3	76	3.7
27	132.3	77	377.3	27	1.3	77	3.8
28	137.2	78	382.2	28	1.4	78	3.8
29	142.1	79	387.1	29	1.4	79	3.9
<b>30</b>	<b>147.0</b>	<b>80</b>	<b>392.0</b>	<b>30</b>	<b>1.5</b>	<b>80</b>	<b>3.9</b>
31	151.9	81	396.9	31	1.5	81	3.9
32	156.8	82	401.8	32	1.5	82	4.0
33	161.7	83	406.7	33	1.6	83	4.0
34	166.6	84	411.6	34	1.6	84	4.1
35	171.5	85	416.5	35	1.7	85	4.1
36	176.4	86	421.4	36	1.7	86	4.2
37	181.3	87	426.3	37	1.8	87	4.2
38	186.2	88	431.2	38	1.8	88	4.3
39	191.1	89	436.1	39	1.9	89	4.3
<b>40</b>	<b>196.0</b>	<b>90</b>	<b>441.0</b>	<b>40</b>	<b>1.9</b>	<b>90</b>	<b>4.4</b>
41	200.9	91	445.9	41	2.0	91	4.4
42	205.8	92	450.8	42	2.0	92	4.5
43	210.7	93	455.7	43	2.1	93	4.5
44	215.6	94	460.6	44	2.1	94	4.6
45	220.5	95	465.5	45	2.2	95	4.6
46	225.4	96	470.4	46	2.2	96	4.7
47	230.3	97	475.3	47	2.3	97	4.7
48	235.2	98	480.2	48	2.3	98	4.8
49	240.1	99	485.1	49	2.4	99	4.8
<b>50</b>	<b>245.0</b>	<b>100</b>	<b>490.0</b>	<b>50</b>	<b>2.4</b>	<b>100</b>	<b>4.9</b>

## 5.0 PER CENT. TEST

MILK.	FAT.	MILK.	FAT.	MILK.	FAT.	MILK.	FAT.
1	5.0	51	255.0	1	.....	51	2.5
2	10.0	52	260.0	2	.1	52	2.6
3	15.0	53	265.0	3	.1	53	2.6
4	20.0	54	270.0	4	.2	54	2.7
5	25.0	55	275.0	5	.2	55	2.7
6	30.0	56	280.0	6	.3	56	2.8
7	35.0	57	285.0	7	.3	57	2.8
8	40.0	58	290.0	8	.4	58	2.9
9	45.0	59	295.0	9	.4	59	2.9
10	50.0	60	300.0	10	.5	60	3.0
11	55.0	61	305.0	11	.5	61	3.0
12	60.0	62	310.0	12	.6	62	3.1
13	65.0	63	315.0	13	.6	63	3.1
14	70.0	64	320.0	14	.7	64	3.2
15	75.0	65	325.0	15	.7	65	3.2
16	80.0	66	330.0	16	.8	66	3.3
17	85.0	67	335.0	17	.8	67	3.3
18	90.0	68	340.0	18	.9	68	3.4
19	95.0	69	345.0	19	.9	69	3.4
20	100.0	70	350.0	20	1.0	70	3.5
21	105.0	71	355.0	21	1.0	71	3.5
22	110.0	72	360.0	22	1.1	72	3.6
23	115.0	73	365.0	23	1.1	73	3.6
24	120.0	74	370.0	24	1.2	74	3.7
25	125.0	75	375.0	25	1.2	75	3.7
26	130.0	76	380.0	26	1.3	76	3.8
27	135.0	77	385.0	27	1.3	77	3.8
28	140.0	78	390.0	28	1.4	78	3.9
29	145.0	79	395.0	29	1.4	79	3.9
30	150.0	80	400.0	30	1.5	80	4.0
31	155.0	81	405.0	31	1.5	81	4.0
32	160.0	82	410.0	32	1.6	82	4.1
33	165.0	83	415.0	33	1.6	83	4.1
34	170.0	84	420.0	34	1.7	84	4.2
35	175.0	85	425.0	35	1.7	85	4.2
36	180.0	86	430.0	36	1.8	86	4.3
37	185.0	87	435.0	37	1.8	87	4.3
38	190.0	88	440.0	38	1.9	88	4.4
39	195.0	89	445.0	39	1.9	89	4.4
40	200.0	90	450.0	40	2.0	90	4.5
41	205.0	91	455.0	41	2.0	91	4.5
42	210.0	92	460.0	42	2.1	92	4.6
43	215.0	93	465.0	43	2.1	93	4.6
44	220.0	94	470.0	44	2.2	94	4.7
45	225.0	95	475.0	45	2.2	95	4.7
46	230.0	96	480.0	46	2.3	96	4.8
47	235.0	97	485.0	47	2.3	97	4.8
48	240.0	98	490.0	48	2.4	98	4.9
49	245.0	99	495.0	49	2.4	99	4.9
50	250.0	100	500.0	50	2.5	100	5.0

## 5.1 PER CENT. TEST.

51

MILK.	FAT.	MILK.	FAT.	MILK.	FAT.	MILK.	FAT.
1	5.1	51	260.1	1	.....	51	2.6
2	10.2	52	265.2	2	.1	52	2.6
3	15.3	53	270.3	3	.1	53	2.7
4	20.4	54	275.4	4	.2	54	2.7
5	25.5	55	280.5	5	.2	55	2.8
6	30.6	56	285.6	6	.3	56	2.8
7	35.7	57	290.7	7	.3	57	2.9
8	40.8	58	295.8	8	.4	58	2.9
9	45.9	59	300.9	9	.4	59	3.0
10	51.0	60	306.0	10	.5	60	3.0
11	56.1	61	311.1	11	.5	61	3.1
12	61.2	62	316.2	12	.6	62	3.1
13	66.3	63	321.3	13	.6	63	3.2
14	71.4	64	326.4	14	.7	64	3.2
15	76.5	65	331.5	15	.7	65	3.3
16	81.6	66	336.6	16	.8	66	3.3
17	86.7	67	341.7	17	.8	67	3.4
18	91.8	68	346.8	18	.9	68	3.4
19	96.9	69	351.9	19	.9	69	3.5
20	102.0	70	357.0	20	1.0	70	3.6
21	107.1	71	362.1	21	1.1	71	3.6
22	112.2	72	367.2	22	1.1	72	3.7
23	117.3	73	372.3	23	1.2	73	3.7
24	122.4	74	377.4	24	1.2	74	3.8
25	127.5	75	382.5	25	1.3	75	3.8
26	132.6	76	387.6	26	1.3	76	3.9
27	137.7	77	392.7	27	1.4	77	3.9
28	142.8	78	397.8	28	1.4	78	4.0
29	147.9	79	402.9	29	1.5	79	4.0
30	153.0	80	408.0	30	1.5	80	4.1
31	158.1	81	413.1	31	1.6	81	4.1
32	163.2	82	418.2	32	1.6	82	4.2
33	168.3	83	423.3	33	1.7	83	4.2
34	173.4	84	428.4	34	1.7	84	4.3
35	178.5	85	433.5	35	1.8	85	4.3
36	183.6	86	438.6	36	1.8	86	4.4
37	188.7	87	443.7	37	1.9	87	4.4
38	193.8	88	448.8	38	1.9	88	4.5
39	198.9	89	453.9	39	2.0	89	4.5
40	204.0	90	459.0	40	2.0	90	4.6
41	209.1	91	464.1	41	2.1	91	4.6
42	214.2	92	469.2	42	2.1	92	4.7
43	219.3	93	474.3	43	2.2	93	4.7
44	224.4	94	479.4	44	2.2	94	4.8
45	229.5	95	484.5	45	2.3	95	4.8
46	234.6	96	489.6	46	2.3	96	4.9
47	239.7	97	494.7	47	2.4	97	4.9
48	244.8	98	499.8	48	2.4	98	5.0
49	249.9	99	504.9	49	2.5	99	5.0
50	255.0	100	510.0	50	2.5	100	5.1

## 5.2 PER CENT. TEST

MILK.	FAT.	MILK.	FAT.	MILK.	FAT.	MILK.	FAT.
1	5.2	51	265.2	1	.....	51	2.6
2	10.4	52	270.4	2	1	52	2.7
3	15.6	53	275.6	3	.1	53	2.7
4	20.8	54	280.8	4	.2	54	2.8
5	26.0	55	286.0	5	.2	55	2.8
6	31.2	56	291.2	6	3	56	2.9
7	36.4	57	296.4	7	.3	57	2.9
8	41.6	58	301.6	8	.4	58	3.0
9	46.8	59	306.8	9	.4	59	3.0
<b>10</b>	<b>52.0</b>	<b>60</b>	<b>312.0</b>	<b>10</b>	<b>.5</b>	<b>60</b>	<b>3.1</b>
11	57.2	61	317.2	11	.6	61	3.2
12	62.4	62	322.4	12	.6	62	3.2
13	67.6	63	327.6	13	.7	63	3.3
14	72.8	64	332.8	14	.7	64	3.3
15	78.0	65	338.0	15	.8	65	3.4
16	83.2	66	343.2	16	.8	66	3.4
17	88.4	67	348.4	17	.9	67	3.5
18	93.6	68	353.6	18	.9	68	3.5
19	98.8	69	358.8	19	1.0	69	3.6
<b>20</b>	<b>104.0</b>	<b>70</b>	<b>364.0</b>	<b>20</b>	<b>1.0</b>	<b>70</b>	<b>3.6</b>
21	109.2	71	369.2	21	1.1	71	3.7
22	114.4	72	374.4	22	1.1	72	3.7
23	119.6	73	379.6	23	1.2	73	3.8
24	124.8	74	384.8	24	1.2	74	3.8
25	130.0	75	390.0	25	1.3	75	3.9
26	135.2	76	395.2	26	1.3	76	3.9
27	140.4	77	400.4	27	1.4	77	4.0
28	145.6	78	405.6	28	1.4	78	4.0
29	150.8	79	410.8	29	1.5	79	4.1
<b>30</b>	<b>156.0</b>	<b>80</b>	<b>416.0</b>	<b>30</b>	<b>1.5</b>	<b>80</b>	<b>4.1</b>
31	161.2	81	421.2	31	1.6	81	4.2
32	166.4	82	426.4	32	1.6	82	4.2
33	171.6	83	431.6	33	1.7	83	4.3
34	176.8	84	436.8	34	1.7	84	4.3
35	182.0	85	442.0	35	1.8	85	4.4
36	187.2	86	447.2	36	1.9	86	4.5
37	192.4	87	452.4	37	1.9	87	4.5
38	197.6	88	457.6	38	2.0	88	4.6
39	202.8	89	462.8	39	2.0	89	4.6
<b>40</b>	<b>208.0</b>	<b>90</b>	<b>468.0</b>	<b>40</b>	<b>2.1</b>	<b>90</b>	<b>4.7</b>
41	213.2	91	473.2	41	2.1	91	4.7
42	218.4	92	478.4	42	2.2	92	4.8
43	223.6	93	483.6	43	2.2	93	4.8
44	228.8	94	488.8	44	2.3	94	4.9
45	234.0	95	494.0	45	2.3	95	4.9
46	239.2	96	499.2	46	2.4	96	5.0
47	244.4	97	504.4	47	2.4	97	5.0
48	249.6	98	509.6	48	2.5	98	5.1
49	254.8	99	514.8	49	2.5	99	5.1
<b>50</b>	<b>260.0</b>	<b>100</b>	<b>520.0</b>	<b>50</b>	<b>2.6</b>	<b>100</b>	<b>5.2</b>



## 5.3 PER CENT. TEST.

53

MILK.	FAT.	MILK.	FAT.	MILK.	FAT.	MILK.	FAT.
1	5.3	51	270.3	1	.....	51	2.7
2	10.6	52	275.6	2	.1	52	2.7
3	15.9	53	280.9	3	.1	53	2.8
4	21.2	54	286.2	4	.2	54	2.8
5	26.5	55	291.5	5	.2	55	2.9
6	31.8	56	296.8	6	.3	56	2.9
7	37.1	57	302.1	7	.4	57	3.0
8	42.4	58	307.4	8	.4	58	3.1
9	47.7	59	312.7	9	.5	59	3.1
10	53.0	60	318.0	10	.5	60	3.2
11	58.3	61	323.3	11	.6	61	3.2
12	63.6	62	328.6	12	.6	62	3.3
13	68.9	63	333.9	13	.7	63	3.3
14	74.2	64	339.2	14	.7	64	3.4
15	79.5	65	344.5	15	.8	65	3.4
16	84.8	66	349.8	16	.8	66	3.5
17	90.1	67	355.1	17	.9	67	3.5
18	95.4	68	360.4	18	.9	68	3.6
19	100.7	69	365.7	19	1.0	69	3.6
20	106.0	70	371.0	20	1.0	70	3.7
21	111.3	71	376.3	21	1.1	71	3.7
22	116.6	72	381.6	22	1.1	72	3.8
23	121.9	73	386.9	23	1.2	73	3.8
24	127.2	74	392.2	24	1.3	74	3.9
25	132.5	75	397.5	25	1.3	75	4.0
26	137.8	76	402.8	26	1.4	76	4.0
27	143.1	77	408.1	27	1.4	77	4.1
28	148.4	78	413.4	28	1.5	78	4.1
29	153.7	79	418.7	29	1.5	79	4.2
30	159.0	80	424.0	30	1.6	80	4.2
31	164.3	81	429.3	31	1.6	81	4.3
32	169.6	82	434.6	32	1.7	82	4.3
33	174.9	83	439.9	33	1.7	83	4.4
34	180.2	84	445.2	34	1.8	84	4.4
35	185.5	85	450.5	35	1.8	85	4.5
36	190.8	86	455.8	36	1.9	86	4.5
37	196.1	87	461.1	37	1.9	87	4.6
38	201.4	88	466.4	38	2.0	88	4.6
39	206.7	89	471.7	39	2.0	89	4.7
40	212.0	90	477.0	40	2.1	90	4.8
41	217.3	91	482.3	41	2.2	91	4.8
42	222.6	92	487.6	42	2.2	92	4.9
43	227.9	93	492.9	43	2.3	93	4.9
44	233.2	94	498.2	44	2.3	94	5.0
45	238.5	95	503.5	45	2.4	95	5.0
46	243.8	96	508.8	46	2.4	96	5.1
47	249.1	97	514.1	47	2.5	97	5.1
48	254.4	98	519.4	48	2.5	98	5.2
49	259.7	99	524.7	49	2.6	99	5.2
50	265.0	100	530.0	50	2.6	100	5.3

## 5.4 PER CENT. TEST.

MILK.	FAT.	MILK.	FAT.	MILK.	FAT.	MILK.	FAT.
1	5.4	51	275.4	1	.....	51	2.7
2	10.8	52	280.8	2	.1	52	2.8
3	16.2	53	286.2	3	.1	53	2.8
4	21.6	54	291.6	4	.2	54	2.9
5	27.0	55	297.0	5	.3	55	3.0
6	32.4	56	302.4	6	.3	56	3.0
7	37.8	57	307.8	7	.4	57	3.1
8	43.2	58	313.2	8	.4	58	3.1
9	48.6	59	318.6	9	.5	59	3.2
10	54.0	60	324.0	10	.5	60	3.2
11	59.4	61	329.4	11	.6	61	3.3
12	64.8	62	334.8	12	.6	62	3.3
13	70.2	63	340.2	13	.7	63	3.4
14	75.6	64	345.6	14	.7	64	3.4
15	81.0	65	351.0	15	.8	65	3.5
16	86.4	66	356.4	16	.8	66	3.5
17	91.8	67	361.8	17	.9	67	3.6
18	97.2	68	367.2	18	1.0	68	3.7
19	102.6	69	372.6	19	1.0	69	3.7
20	108.0	70	378.0	20	1.1	70	3.8
21	113.4	71	383.4	21	1.1	71	3.8
22	118.8	72	388.8	22	1.2	72	3.9
23	124.2	73	394.2	23	1.2	73	3.9
24	129.6	74	399.6	24	1.3	74	4.0
25	135.0	75	405.0	25	1.3	75	4.0
26	140.4	76	410.4	26	1.4	76	4.1
27	145.8	77	415.8	27	1.4	77	4.1
28	151.2	78	421.2	28	1.5	78	4.2
29	156.6	79	426.6	29	1.5	79	4.2
30	162.0	80	432.0	30	1.6	80	4.3
31	167.4	81	437.4	31	1.7	81	4.4
32	172.8	82	442.8	32	1.7	82	4.4
33	178.2	83	448.2	33	1.8	83	4.5
34	183.6	84	453.6	34	1.8	84	4.5
35	189.0	85	459.0	35	1.9	85	4.6
36	194.4	86	464.4	36	1.9	86	4.6
37	199.8	87	469.8	37	2.0	87	4.7
38	205.2	88	475.2	38	2.0	88	4.7
39	210.6	89	480.6	39	2.1	89	4.8
40	216.0	90	486.0	40	2.1	90	4.8
41	221.4	91	491.4	41	2.2	91	4.9
42	226.8	92	496.8	42	2.2	92	4.9
43	232.2	93	502.2	43	2.3	93	5.0
44	237.6	94	507.6	44	2.4	94	5.1
45	243.0	95	513.0	45	2.4	95	5.1
46	248.4	96	518.4	46	2.5	96	5.2
47	253.8	97	523.8	47	2.5	97	5.2
48	259.2	98	529.2	48	2.6	98	5.3
49	264.6	99	534.6	49	2.6	99	5.3
50	270.0	100	540.0	50	2.7	100	5.4

5.5 PER CENT. TEST.

MILK.	FAT.	MILK.	FAT.	MILK.	FAT.	MILK.	FAT.
1	5.5	51	280.5	1	.....	51	2.8
2	11.0	52	286.0	2	.1	52	2.8
3	16.5	53	291.5	3	.1	53	2.9
4	22.0	54	297.0	4	.2	54	3.0
5	27.5	55	302.5	5	.3	55	3.0
6	33.0	56	308.0	6	.3	56	3.1
7	38.5	57	313.5	7	.4	57	3.1
8	44.0	58	319.0	8	.4	58	3.2
9	49.5	59	324.5	9	.5	59	3.2
10	55.0	60	330.0	10	.5	60	3.3
11	60.5	61	335.5	11	.6	61	3.3
12	66.0	62	341.0	12	.6	62	3.4
13	71.5	63	346.5	13	.7	63	3.4
14	77.0	64	352.0	14	.8	64	3.5
15	82.5	65	357.5	15	.8	65	3.6
16	88.0	66	363.0	16	.9	66	3.6
17	93.5	67	368.5	17	.9	67	3.7
18	99.0	68	374.0	18	1.0	68	3.7
19	104.5	69	379.5	19	1.0	69	3.8
20	110.0	70	385.0	20	1.1	70	3.8
21	115.5	71	390.5	21	1.1	71	3.9
22	121.0	72	396.0	22	1.2	72	3.9
23	126.5	73	401.5	23	1.2	73	4.0
24	132.0	74	407.0	24	1.3	74	4.1
25	137.5	75	412.5	25	1.4	75	4.1
26	143.0	76	418.0	26	1.4	76	4.2
27	148.5	77	423.5	27	1.5	77	4.2
28	154.0	78	429.0	28	1.5	78	4.3
29	159.5	79	434.5	29	1.6	79	4.3
30	165.0	80	440.0	30	1.6	80	4.4
31	170.5	81	445.5	31	1.7	81	4.4
32	176.0	82	451.0	32	1.7	82	4.5
33	181.5	83	456.5	33	1.8	83	4.5
34	187.0	84	462.0	34	1.9	84	4.6
35	192.5	85	467.5	35	1.9	85	4.7
36	198.0	86	473.0	36	2.0	86	4.7
37	203.5	87	478.5	37	2.0	87	4.8
38	209.0	88	484.0	38	2.1	88	4.8
39	214.5	89	489.5	39	2.1	89	4.9
40	220.0	90	495.0	40	2.2	90	4.9
41	225.5	91	500.5	41	2.2	91	5.0
42	231.0	92	506.0	42	2.3	92	5.0
43	236.5	93	511.5	43	2.3	93	5.1
44	242.0	94	517.0	44	2.4	94	5.2
45	247.5	95	522.5	45	2.5	95	5.2
46	253.0	96	528.0	46	2.5	96	5.3
47	258.5	97	533.5	47	2.6	97	5.3
48	264.0	98	539.0	48	2.6	98	5.4
49	269.5	( )	544.5	49	2.7	99	5.4
50	275.0	100	550.0	50	2.7	100	5.5

## 5.6 PER CENT TEST

MILK.	FAT.	MILK.	FAT.	MILK.	FAT.	MILK.	FAT.
1	5.6	51	285.6	1	.....	51	2.8
2	11.2	52	291.2	2	.1	52	2.9
3	16.8	53	296.8	3	.1	53	2.9
4	22.4	54	302.4	4	.2	54	3.0
5	28.0	55	308.0	5	.3	55	3.1
6	33.6	56	313.6	6	.3	56	3.1
7	39.2	57	319.2	7	.4	57	3.2
8	44.8	58	324.8	8	.4	58	3.2
9	50.4	59	330.4	9	.5	59	3.3
<b>10</b>	<b>56.0</b>	<b>60</b>	<b>336.0</b>	<b>10</b>	<b>.5</b>	<b>60</b>	<b>3.3</b>
11	61.6	61	341.6	11	.6	61	3.4
12	67.2	62	347.2	12	.7	62	3.5
13	72.8	63	352.8	13	.7	63	3.5
14	78.4	64	358.4	14	.8	64	3.6
15	84.0	65	364.0	15	.8	65	3.6
16	89.6	66	369.6	16	.9	66	3.7
17	95.2	67	375.2	17	.9	67	3.7
18	100.8	68	380.8	18	1.0	68	3.8
19	106.4	69	386.4	19	1.0	69	3.8
<b>20</b>	<b>112.0</b>	<b>70</b>	<b>392.0</b>	<b>20</b>	<b>1.1</b>	<b>70</b>	<b>3.9</b>
21	117.6	71	397.6	21	1.2	71	4.0
22	123.2	72	403.2	22	1.2	72	4.0
23	128.8	73	408.8	23	1.3	73	4.1
24	134.4	74	414.4	24	1.3	74	4.1
25	140.0	75	420.0	25	1.4	75	4.2
26	145.6	76	425.6	26	1.4	76	4.2
27	151.2	77	431.2	27	1.5	77	4.3
28	156.8	78	436.8	28	1.5	78	4.3
29	162.4	79	442.4	29	1.6	79	4.4
<b>30</b>	<b>168.0</b>	<b>80</b>	<b>448.0</b>	<b>30</b>	<b>1.7</b>	<b>80</b>	<b>4.5</b>
31	173.6	81	453.6	31	1.7	81	4.5
32	179.2	82	459.2	32	1.8	82	4.6
33	184.8	83	464.8	33	1.8	83	4.6
34	190.4	84	470.4	34	1.9	84	4.7
35	196.0	85	476.0	35	1.9	85	4.7
36	201.6	86	481.6	36	2.0	86	4.8
37	207.2	87	487.2	37	2.1	87	4.9
38	212.8	88	492.8	38	2.1	88	4.9
39	218.4	89	498.4	39	2.2	89	5.0
<b>40</b>	<b>224.0</b>	<b>90</b>	<b>504.0</b>	<b>40</b>	<b>2.2</b>	<b>90</b>	<b>5.0</b>
41	229.6	91	509.6	41	2.3	91	5.1
42	235.2	92	515.2	42	2.3	92	5.1
43	240.8	93	520.8	43	2.4	93	5.2
44	246.4	94	526.4	44	2.4	94	5.2
45	252.0	95	532.0	45	2.5	95	5.3
46	257.6	96	537.6	46	2.6	96	5.4
47	263.2	97	543.2	47	2.6	97	5.4
48	268.8	98	548.8	48	2.7	98	5.5
49	274.4	99	554.4	49	2.7	99	5.5
<b>50</b>	<b>280.0</b>	<b>100</b>	<b>560.0</b>	<b>50</b>	<b>2.8</b>	<b>100</b>	<b>5.6</b>

5.7 PER CENT. TEST

MILK.	FAT.	MILK.	FAT.	MILK.	FAT.	MILK.	FAT.
1	5.7	51	290.7	1	.....	51	2.9
2	11.4	52	296.4	2	.1	52	2.9
3	17.1	53	302.1	3	.2	53	3.0
4	22.8	54	307.8	4	.2	54	3.1
5	28.5	55	313.5	5	.3	55	3.1
6	34.2	56	319.2	6	.3	56	3.2
7	39.9	57	324.9	7	.4	57	3.2
8	45.6	58	330.6	8	.4	58	3.3
9	51.3	59	336.3	9	.5	59	3.3
10	57.0	60	342.0	10	.6	60	3.4
11	62.7	61	347.7	11	.6	61	3.5
12	68.4	62	353.4	12	.7	62	3.5
13	74.1	63	359.1	13	.7	63	3.6
14	79.8	64	364.8	14	.8	64	3.6
15	85.5	65	370.5	15	.8	65	3.7
16	91.2	66	376.2	16	.9	66	3.7
17	96.9	67	381.9	17	.9	67	3.8
18	102.6	68	387.6	18	1.0	68	3.9
19	108.3	69	393.3	19	1.1	69	3.9
20	114.0	70	399.0	20	1.1	70	4.0
21	119.7	71	404.7	21	1.2	71	4.0
22	125.4	72	410.4	22	1.2	72	4.1
23	131.1	73	416.1	23	1.3	73	4.1
24	136.8	74	421.8	24	1.3	74	4.2
25	142.5	75	427.5	25	1.4	75	4.3
26	148.2	76	433.2	26	1.5	76	4.3
27	153.9	77	438.9	27	1.5	77	4.4
28	159.6	78	444.6	28	1.6	78	4.4
29	165.3	79	450.3	29	1.6	79	4.5
30	171.0	80	456.0	30	1.7	80	4.5
31	176.7	81	461.7	31	1.7	81	4.6
32	182.4	82	467.4	32	1.8	82	4.7
33	188.1	83	473.1	33	1.9	83	4.7
34	193.8	84	478.8	34	1.9	84	4.8
35	199.5	85	484.5	35	2.0	85	4.8
36	205.2	86	490.2	36	2.0	86	4.9
37	210.9	87	495.9	37	2.1	87	4.9
38	216.6	88	501.6	38	2.1	88	5.0
39	222.3	89	507.3	39	2.2	89	5.1
40	228.0	90	513.0	40	2.3	90	5.1
41	233.7	91	518.7	41	2.3	91	5.2
42	239.4	92	524.4	42	2.4	92	5.2
43	245.1	93	530.1	43	2.4	93	5.3
44	250.8	94	535.8	44	2.5	94	5.3
45	256.5	95	541.5	45	2.5	95	5.4
46	262.2	96	547.2	46	2.6	96	5.5
47	267.9	97	552.9	47	2.7	97	5.5
48	273.6	98	558.6	48	2.7	98	5.6
49	279.3	99	564.3	49	2.8	99	5.6
50	285.0	100	570.0	50	2.8	100	5.7

## 5.8 PER CENT. TEST.

MILK.	FAT.	MILK.	FAT.	MILK.	FAT.	MILK.	FAT.
1	5.8	51	295.8	1	.....	51	2.9
2	11.6	52	301.6	2	.1	52	3.0
3	17.4	53	307.4	3	.2	53	3.1
4	23.2	54	313.2	4	.2	54	3.1
5	29.0	55	319.0	5	.3	55	3.2
6	34.8	56	324.8	6	.3	56	3.2
7	40.6	57	330.6	7	.4	57	3.3
8	46.4	58	336.4	8	.4	58	3.3
9	52.2	59	342.2	9	.5	59	3.4
10	58.0	60	348.0	10	.6	60	3.5
11	63.8	61	353.8	11	.6	61	3.5
12	69.6	62	359.6	12	.7	62	3.6
13	75.4	63	365.4	13	.7	63	3.6
14	81.2	64	371.2	14	.8	64	3.7
15	87.0	65	377.0	15	.9	65	3.8
16	92.8	66	382.8	16	.9	66	3.8
17	98.6	67	388.6	17	1.0	67	3.9
18	104.4	68	394.4	18	1.0	68	3.9
19	110.2	69	400.2	19	1.1	69	4.0
20	116.0	70	406.0	20	1.1	70	4.0
21	121.8	71	411.8	21	1.2	71	4.1
22	127.6	72	417.6	22	1.3	72	4.2
23	133.4	73	423.4	23	1.3	73	4.2
24	139.2	74	429.2	24	1.4	74	4.3
25	145.0	75	435.0	25	1.4	75	4.3
26	150.8	76	440.8	26	1.5	76	4.4
27	156.6	77	446.6	27	1.5	77	4.4
28	162.4	78	452.4	28	1.6	78	4.5
29	168.2	79	458.2	29	1.7	79	4.6
30	174.0	80	464.0	30	1.7	80	4.6
31	179.8	81	469.8	31	1.8	81	4.7
32	185.6	82	475.6	32	1.8	82	4.7
33	191.4	83	481.4	33	1.9	83	4.8
34	197.2	84	487.2	34	2.0	84	4.9
35	203.0	85	493.0	35	2.0	85	4.9
36	208.8	86	498.8	36	2.1	86	5.0
37	214.6	87	504.6	37	2.1	87	5.0
38	220.4	88	510.4	38	2.2	88	5.1
39	226.2	89	516.2	39	2.2	89	5.1
40	232.0	90	522.0	40	2.3	90	5.2
41	237.8	91	527.8	41	2.4	91	5.3
42	243.6	92	533.6	42	2.4	92	5.3
43	249.4	93	539.4	43	2.5	93	5.4
44	255.2	94	545.2	44	2.5	94	5.4
45	261.0	95	551.0	45	2.6	95	5.5
46	266.8	96	556.8	46	2.6	96	5.5
47	272.6	97	562.6	47	2.7	97	5.6
48	278.4	98	568.4	48	2.8	98	5.7
49	284.2	99	574.2	49	2.8	99	5.7
50	290.0	100	580.0	50	2.9	100	5.8

5.9 PER CENT. TEST.

MILK.	FAT.	MILK.	FAT.	MILK.	FAT.	MILK.	FAT.
1	5.9	51	300.9	1	.....	51	3.0
2	11.8	52	306.8	2	.1	52	3.0
3	17.7	53	312.7	3	.2	53	3.1
4	23.6	54	318.6	4	.2	54	3.2
5	29.5	55	324.5	5	.3	55	3.2
6	35.4	56	330.4	6	.3	56	3.3
7	41.3	57	336.3	7	.4	57	3.3
8	47.2	58	342.2	8	.5	58	3.4
9	53.1	59	348.1	9	.5	59	3.5
10	59.0	60	354.0	10	.6	60	3.5
11	64.9	61	359.9	11	.6	61	3.6
12	70.8	62	365.8	12	.7	62	3.6
13	76.7	63	371.7	13	.7	63	3.7
14	82.6	64	377.6	14	.8	64	3.8
15	88.5	65	383.5	15	.9	65	3.8
16	94.4	66	389.4	16	.9	66	3.9
17	100.3	67	395.3	17	1.0	67	3.9
18	106.2	68	401.2	18	1.0	68	4.0
19	112.1	69	407.1	19	1.1	69	4.1
20	118.0	70	413.0	20	1.2	70	4.1
21	123.9	71	418.9	21	1.2	71	4.2
22	129.8	72	424.8	22	1.3	72	4.2
23	135.7	73	430.7	23	1.3	73	4.3
24	141.6	74	436.6	24	1.4	74	4.3
25	147.5	75	442.5	25	1.5	75	4.4
26	153.4	76	448.4	26	1.5	76	4.5
27	159.3	77	454.3	27	1.6	77	4.5
28	165.2	78	460.2	28	1.6	78	4.6
29	171.1	79	466.1	29	1.7	79	4.6
30	177.0	80	472.0	30	1.8	80	4.7
31	182.9	81	477.9	31	1.8	81	4.8
32	188.8	82	483.8	32	1.9	82	4.8
33	194.7	83	489.7	33	1.9	83	4.9
34	200.6	84	495.6	34	2.0	84	4.9
35	206.5	85	501.5	35	2.0	85	5.0
36	212.4	86	507.4	36	2.1	86	5.1
37	218.3	87	513.3	37	2.2	87	5.1
38	224.2	88	519.2	38	2.2	88	5.2
39	230.1	89	525.1	39	2.3	89	5.2
40	236.0	90	531.0	40	2.3	90	5.3
41	241.9	91	536.9	41	2.4	91	5.3
42	247.8	92	542.8	42	2.5	92	5.4
43	253.7	93	548.7	43	2.5	93	5.5
44	259.6	94	554.6	44	2.6	94	5.5
45	265.5	95	560.5	45	2.6	95	5.6
46	271.4	96	566.4	46	2.7	96	5.6
47	277.3	97	572.3	47	2.8	97	5.7
48	283.2	98	578.2	48	2.8	98	5.8
49	289.1	99	584.1	49	2.9	99	5.8
50	295.0	100	590.0	50	2.9	100	5.9

## MONEY CALCULATING TABLES.

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### 14 Cent Table.

$14 \times 1 = 14$
$14 \times 2 = 28$
$14 \times 3 = 42$
$14 \times 4 = 56$
$14 \times 5 = 70$
$14 \times 6 = 84$
$14 \times 7 = 98$
$14 \times 8 = 112$
$14 \times 9 = 126$

### 16 Cent Table.

$16 \times 1 = 16$
$16 \times 2 = 32$
$16 \times 3 = 48$
$16 \times 4 = 64$
$16 \times 5 = 80$
$16 \times 6 = 96$
$16 \times 7 = 112$
$16 \times 8 = 128$
$16 \times 9 = 144$

### 18 Cent Table.

$18 \times 1 = 18$
$18 \times 2 = 36$
$18 \times 3 = 54$
$18 \times 4 = 72$
$18 \times 5 = 90$
$18 \times 6 = 108$
$18 \times 7 = 126$
$18 \times 8 = 144$
$18 \times 9 = 162$

### 20 Cent Table.

$20 \times 1 = 20$
$20 \times 2 = 40$
$20 \times 3 = 60$
$20 \times 4 = 80$
$20 \times 5 = 100$
$20 \times 6 = 120$
$20 \times 7 = 140$
$20 \times 8 = 160$
$20 \times 9 = 180$

### 14½ Cent Table.

$145 \times 1 = 145$
$145 \times 2 = 290$
$145 \times 3 = 435$
$145 \times 4 = 580$
$145 \times 5 = 725$
$145 \times 6 = 870$
$145 \times 7 = 1015$
$145 \times 8 = 1160$
$145 \times 9 = 1305$

### 16½ Cent Table.

$165 \times 1 = 165$
$165 \times 2 = 330$
$165 \times 3 = 495$
$165 \times 4 = 660$
$165 \times 5 = 825$
$165 \times 6 = 990$
$165 \times 7 = 1155$
$165 \times 8 = 1320$
$165 \times 9 = 1485$

### 18½ Cent Table.

$185 \times 1 = 185$
$185 \times 2 = 370$
$185 \times 3 = 555$
$185 \times 4 = 740$
$185 \times 5 = 925$
$185 \times 6 = 1110$
$185 \times 7 = 1295$
$185 \times 8 = 1480$
$185 \times 9 = 1665$

### 20½ Cent Table.

$205 \times 1 = 205$
$205 \times 2 = 410$
$205 \times 3 = 615$
$205 \times 4 = 820$
$205 \times 5 = 1025$
$205 \times 6 = 1230$
$205 \times 7 = 1435$
$205 \times 8 = 1640$
$205 \times 9 = 1845$

### 15 Cent Table.

$15 \times 1 = 15$
$15 \times 2 = 30$
$15 \times 3 = 45$
$15 \times 4 = 60$
$15 \times 5 = 75$
$15 \times 6 = 90$
$15 \times 7 = 105$
$15 \times 8 = 120$
$15 \times 9 = 135$

### 17 Cent Table.

$17 \times 1 = 17$
$17 \times 2 = 34$
$17 \times 3 = 51$
$17 \times 4 = 68$
$17 \times 5 = 85$
$17 \times 6 = 102$
$17 \times 7 = 119$
$17 \times 8 = 136$
$17 \times 9 = 153$

### 19 Cent Table.

$19 \times 1 = 19$
$19 \times 2 = 38$
$19 \times 3 = 57$
$19 \times 4 = 76$
$19 \times 5 = 95$
$19 \times 6 = 114$
$19 \times 7 = 133$
$19 \times 8 = 152$
$19 \times 9 = 171$

### 21 Cent Table.

$21 \times 1 = 21$
$21 \times 2 = 42$
$21 \times 3 = 63$
$21 \times 4 = 84$
$21 \times 5 = 105$
$21 \times 6 = 126$
$21 \times 7 = 147$
$21 \times 8 = 168$
$21 \times 9 = 189$

### 15½ Cent Table.

$155 \times 1 = 155$
$155 \times 2 = 310$
$155 \times 3 = 465$
$155 \times 4 = 620$
$155 \times 5 = 775$
$155 \times 6 = 930$
$155 \times 7 = 1085$
$155 \times 8 = 1240$
$155 \times 9 = 1395$

### 17½ Cent Table.

$175 \times 1 = 175$
$175 \times 2 = 350$
$175 \times 3 = 525$
$175 \times 4 = 700$
$175 \times 5 = 875$
$175 \times 6 = 1050$
$175 \times 7 = 1225$
$175 \times 8 = 1400$
$175 \times 9 = 1575$

### 19½ Cent Table.

$195 \times 1 = 195$
$195 \times 2 = 390$
$195 \times 3 = 585$
$195 \times 4 = 780$
$195 \times 5 = 975$
$195 \times 6 = 1170$
$195 \times 7 = 1365$
$195 \times 8 = 1560$
$195 \times 9 = 1755$

### 21½ Cent Table.

$215 \times 1 = 215$
$215 \times 2 = 430$
$215 \times 3 = 645$
$215 \times 4 = 860$
$215 \times 5 = 1075$
$215 \times 6 = 1290$
$215 \times 7 = 1505$
$215 \times 8 = 1720$
$215 \times 9 = 1935$



**22 Cent Table.**

$$\begin{aligned} 22 \times 1 &= 22 \\ 22 \times 2 &= 44 \\ 22 \times 3 &= 66 \\ 22 \times 4 &= 88 \\ 22 \times 5 &= 110 \\ 22 \times 6 &= 132 \\ 22 \times 7 &= 154 \\ 22 \times 8 &= 176 \\ 22 \times 9 &= 198 \end{aligned}$$
**24 Cent Table.**

$$\begin{aligned} 24 \times 1 &= 24 \\ 24 \times 2 &= 48 \\ 24 \times 3 &= 72 \\ 24 \times 4 &= 96 \\ 24 \times 5 &= 120 \\ 24 \times 6 &= 144 \\ 24 \times 7 &= 168 \\ 24 \times 8 &= 192 \\ 24 \times 9 &= 216 \end{aligned}$$
**26 Cent Table.**

$$\begin{aligned} 26 \times 1 &= 26 \\ 26 \times 2 &= 52 \\ 26 \times 3 &= 78 \\ 26 \times 4 &= 104 \\ 26 \times 5 &= 130 \\ 26 \times 6 &= 156 \\ 26 \times 7 &= 182 \\ 26 \times 8 &= 208 \\ 26 \times 9 &= 234 \end{aligned}$$
**28 Cent Table.**

$$\begin{aligned} 28 \times 1 &= 28 \\ 28 \times 2 &= 56 \\ 28 \times 3 &= 84 \\ 28 \times 4 &= 112 \\ 28 \times 5 &= 140 \\ 28 \times 6 &= 168 \\ 28 \times 7 &= 196 \\ 28 \times 8 &= 224 \\ 28 \times 9 &= 252 \end{aligned}$$
**22½ Cent Table.**

$$\begin{aligned} 22\frac{1}{2} \times 1 &= 22\frac{1}{2} \\ 22\frac{1}{2} \times 2 &= 45 \\ 22\frac{1}{2} \times 3 &= 67\frac{1}{2} \\ 22\frac{1}{2} \times 4 &= 90 \\ 22\frac{1}{2} \times 5 &= 112\frac{1}{2} \\ 22\frac{1}{2} \times 6 &= 135 \\ 22\frac{1}{2} \times 7 &= 157\frac{1}{2} \\ 22\frac{1}{2} \times 8 &= 180 \\ 22\frac{1}{2} \times 9 &= 202\frac{1}{2} \end{aligned}$$
**24½ Cent Table.**

$$\begin{aligned} 24\frac{1}{2} \times 1 &= 24\frac{1}{2} \\ 24\frac{1}{2} \times 2 &= 49 \\ 24\frac{1}{2} \times 3 &= 73\frac{1}{2} \\ 24\frac{1}{2} \times 4 &= 98 \\ 24\frac{1}{2} \times 5 &= 122\frac{1}{2} \\ 24\frac{1}{2} \times 6 &= 147 \\ 24\frac{1}{2} \times 7 &= 171\frac{1}{2} \\ 24\frac{1}{2} \times 8 &= 196 \\ 24\frac{1}{2} \times 9 &= 220\frac{1}{2} \end{aligned}$$
**26½ Cent Table.**

$$\begin{aligned} 26\frac{1}{2} \times 1 &= 26\frac{1}{2} \\ 26\frac{1}{2} \times 2 &= 53 \\ 26\frac{1}{2} \times 3 &= 79\frac{1}{2} \\ 26\frac{1}{2} \times 4 &= 106 \\ 26\frac{1}{2} \times 5 &= 132\frac{1}{2} \\ 26\frac{1}{2} \times 6 &= 159 \\ 26\frac{1}{2} \times 7 &= 185\frac{1}{2} \\ 26\frac{1}{2} \times 8 &= 212 \\ 26\frac{1}{2} \times 9 &= 238\frac{1}{2} \end{aligned}$$
**28½ Cent Table.**

$$\begin{aligned} 28\frac{1}{2} \times 1 &= 28\frac{1}{2} \\ 28\frac{1}{2} \times 2 &= 57 \\ 28\frac{1}{2} \times 3 &= 85\frac{1}{2} \\ 28\frac{1}{2} \times 4 &= 114 \\ 28\frac{1}{2} \times 5 &= 142\frac{1}{2} \\ 28\frac{1}{2} \times 6 &= 171 \\ 28\frac{1}{2} \times 7 &= 199\frac{1}{2} \\ 28\frac{1}{2} \times 8 &= 228 \\ 28\frac{1}{2} \times 9 &= 256\frac{1}{2} \end{aligned}$$
**23 Cent Table.**

$$\begin{aligned} 23 \times 1 &= 23 \\ 23 \times 2 &= 46 \\ 23 \times 3 &= 69 \\ 23 \times 4 &= 92 \\ 23 \times 5 &= 115 \\ 23 \times 6 &= 138 \\ 23 \times 7 &= 161 \\ 23 \times 8 &= 184 \\ 23 \times 9 &= 207 \end{aligned}$$
**25 Cent Table.**

$$\begin{aligned} 25 \times 1 &= 25 \\ 25 \times 2 &= 50 \\ 25 \times 3 &= 75 \\ 25 \times 4 &= 100 \\ 25 \times 5 &= 125 \\ 25 \times 6 &= 150 \\ 25 \times 7 &= 175 \\ 25 \times 8 &= 200 \\ 25 \times 9 &= 225 \end{aligned}$$
**27 Cent Table.**

$$\begin{aligned} 27 \times 1 &= 27 \\ 27 \times 2 &= 54 \\ 27 \times 3 &= 81 \\ 27 \times 4 &= 108 \\ 27 \times 5 &= 135 \\ 27 \times 6 &= 162 \\ 27 \times 7 &= 189 \\ 27 \times 8 &= 216 \\ 27 \times 9 &= 243 \end{aligned}$$
**29 Cent Table.**

$$\begin{aligned} 29 \times 1 &= 29 \\ 29 \times 2 &= 58 \\ 29 \times 3 &= 87 \\ 29 \times 4 &= 116 \\ 29 \times 5 &= 145 \\ 29 \times 6 &= 174 \\ 29 \times 7 &= 203 \\ 29 \times 8 &= 232 \\ 29 \times 9 &= 261 \end{aligned}$$
**23½ Cent Table.**

$$\begin{aligned} 23\frac{1}{2} \times 1 &= 23\frac{1}{2} \\ 23\frac{1}{2} \times 2 &= 47 \\ 23\frac{1}{2} \times 3 &= 70\frac{1}{2} \\ 23\frac{1}{2} \times 4 &= 94 \\ 23\frac{1}{2} \times 5 &= 117\frac{1}{2} \\ 23\frac{1}{2} \times 6 &= 141 \\ 23\frac{1}{2} \times 7 &= 164\frac{1}{2} \\ 23\frac{1}{2} \times 8 &= 188 \\ 23\frac{1}{2} \times 9 &= 211\frac{1}{2} \end{aligned}$$
**25½ Cent Table.**

$$\begin{aligned} 25\frac{1}{2} \times 1 &= 25\frac{1}{2} \\ 25\frac{1}{2} \times 2 &= 51 \\ 25\frac{1}{2} \times 3 &= 76\frac{1}{2} \\ 25\frac{1}{2} \times 4 &= 102 \\ 25\frac{1}{2} \times 5 &= 127\frac{1}{2} \\ 25\frac{1}{2} \times 6 &= 153 \\ 25\frac{1}{2} \times 7 &= 178\frac{1}{2} \\ 25\frac{1}{2} \times 8 &= 204 \\ 25\frac{1}{2} \times 9 &= 229\frac{1}{2} \end{aligned}$$
**27½ Cent Table.**

$$\begin{aligned} 27\frac{1}{2} \times 1 &= 27\frac{1}{2} \\ 27\frac{1}{2} \times 2 &= 55 \\ 27\frac{1}{2} \times 3 &= 82\frac{1}{2} \\ 27\frac{1}{2} \times 4 &= 110 \\ 27\frac{1}{2} \times 5 &= 137\frac{1}{2} \\ 27\frac{1}{2} \times 6 &= 165 \\ 27\frac{1}{2} \times 7 &= 192\frac{1}{2} \\ 27\frac{1}{2} \times 8 &= 220 \\ 27\frac{1}{2} \times 9 &= 247\frac{1}{2} \end{aligned}$$
**29½ Cent Table.**

$$\begin{aligned} 29\frac{1}{2} \times 1 &= 29\frac{1}{2} \\ 29\frac{1}{2} \times 2 &= 59 \\ 29\frac{1}{2} \times 3 &= 88\frac{1}{2} \\ 29\frac{1}{2} \times 4 &= 118 \\ 29\frac{1}{2} \times 5 &= 147\frac{1}{2} \\ 29\frac{1}{2} \times 6 &= 177 \\ 29\frac{1}{2} \times 7 &= 206\frac{1}{2} \\ 29\frac{1}{2} \times 8 &= 236 \\ 29\frac{1}{2} \times 9 &= 265\frac{1}{2} \end{aligned}$$

## DIRECTIONS FOR MAKING DIVIDENDS

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### In Creameries and Cheese Factories According to the Per Cents. of Fat in Milk Delivered, as Recommended by Dr. Babcock.

Find the amount of fat contained in the milk of each patron for any period desired by multiplying the pounds of milk expressed in hundreds by the per cent. of fat found by the test. Add the amount of fat from all the patrons together, thus obtaining the total pounds of fat delivered at the factory. Deduct the expenses of manufacture, etc., from the money received from sales and divide the remainder by the total fat. This gives the price to be paid for each pound of fat. Multiply the pounds of fat delivered by each patron by the price; the product will be the amount which he is to receive.

If it is desired to know the number of pounds of butter made from each patron's milk, divide the total yield of butter by the total fat delivered, the quotient will be the amount of butter made from one pound of fat. The fat delivered by each patron multiplied by the ratio will give the pounds of butter to be credited to each patron.

The accompanying table gives the butter yield from 100 lbs. of milk when the pounds of butter from 1 lb. of fat range from 1.10 to 1.20, and for milks containing from 3 to 5.5 per cent. of fat. To use the table find in the upper horizontal line the number corresponding most nearly to the number of pounds of butter from 1 lb. of fat; the vertical column in which this falls gives the pounds of butter from 100 lbs. of milk containing the per cent. of fat given in the outside columns.

EXAMPLE: A creamery receives during one month 250,000 lbs. of milk which contained 9,531 lbs. of fat; the yield of butter for the same period was 10,983 lbs., which sold for 29 cents per pound, bringing \$3,185.07. The expense for making, etc., was four cents per pound, amounting to \$439.32, leaving \$2,745.75 to be divided among the patrons. Dividing this sum by 9,531, the total pounds of fat, gives \$.288 per pound for the fat. This multiplied by the number of pounds of fat in each patron's milk gives the amount which he should be paid.

The number of pounds of butter, 10,983, divided by 9,531, the number of pounds of fat, gives 1.152 lbs. of butter from each pound of fat. The column headed 1.15 in the table is nearest to this ratio and will therefore give the butter obtained from 100 lbs. of milk containing different per cents. of fat.

If a patron delivered 9,420 lbs. of milk containing 3.2 per cent. of fat during the period considered, his milk would have contained 301.44 lbs. of fat, which, at 28.8 cents per pound, would have amounted to \$86.81. It would have made  $301.44 \times 1.152$ , 347.26 lbs. of butter. In the column headed 1.15 in the table, opposite 3.2 per cent. of fat, we find 3.68, which is the number of pounds of butter from 100 lbs. of this patron's milk. The error from the use of the table in this way will never amount to more than  $\frac{1}{2}$  oz. per 100 lbs. of milk.

**SURPLUS BUTTER TABLE.**

**CHURN YIELD.**

PER CENT. OF FAT.	1.10	1.11	1.12	1.13	1.14	1.15	1.16	1.17	1.18	1.19	1.20	PER CENT. OF FAT.
3.0	3.30	3.33	3.36	3.39	3.42	3.45	3.48	3.51	3.54	3.57	3.60	3.0
3.1	3.41	3.441	3.472	3.503	3.534	3.565	3.596	3.627	3.658	3.689	3.72	3.1
3.2	3.52	3.552	3.584	3.613	3.648	3.680	3.712	3.744	3.776	3.808	3.84	3.2
3.3	3.63	3.663	3.696	3.729	3.762	3.795	3.828	3.861	3.894	3.927	3.96	3.3
3.4	3.74	3.774	3.808	3.842	3.876	3.910	3.944	3.978	4.012	4.046	4.08	3.4
3.5	3.85	3.885	3.920	3.955	3.990	4.025	4.060	4.095	4.130	4.165	4.20	3.5
3.6	3.96	3.996	4.032	4.068	4.104	4.140	4.176	4.212	4.248	4.284	4.32	3.6
3.7	4.07	4.107	4.144	4.181	4.218	4.255	4.292	4.329	4.366	4.403	4.44	3.7
3.8	4.18	4.218	4.256	4.294	4.332	4.370	4.408	4.446	4.484	4.522	4.56	3.8
3.9	4.29	4.329	4.368	4.407	4.446	4.485	4.524	4.563	4.602	4.641	4.68	3.9
4.0	4.40	4.440	4.480	4.520	4.560	4.600	4.640	4.680	4.720	4.760	4.80	4.0
4.1	4.51	4.551	4.592	4.633	4.674	4.715	4.756	4.797	4.838	4.879	4.92	4.1
4.2	4.62	4.662	4.704	4.746	4.788	4.830	4.872	4.914	4.956	4.998	5.04	4.2
4.3	4.73	4.773	4.816	4.859	4.902	4.945	4.988	5.031	5.074	5.117	5.16	4.3
4.4	4.84	4.884	4.928	4.972	5.016	5.060	5.104	5.148	5.192	5.236	5.28	4.4
4.5	4.95	4.995	5.040	5.085	5.130	5.175	5.220	5.265	5.310	5.355	5.40	4.5
4.6	5.06	5.106	5.152	5.198	5.244	5.295	5.336	5.382	5.428	5.474	5.52	4.6
4.7	5.17	5.217	5.264	5.311	5.358	5.405	5.452	5.499	5.546	5.593	5.64	4.7
4.8	5.28	5.328	5.376	5.424	5.472	5.520	5.568	5.616	5.664	5.712	5.76	4.8
4.9	5.39	5.439	5.488	5.537	5.586	5.635	5.684	5.733	5.782	5.831	5.88	4.9
5.0	5.50	5.550	5.600	5.650	5.700	5.750	5.800	5.850	5.900	5.950	6.00	5.0
5.1	5.61	5.661	5.712	5.763	5.814	5.865	5.916	5.967	6.018	6.069	6.12	5.1
5.2	5.72	5.772	5.824	5.876	5.928	5.980	6.032	6.084	6.136	6.188	6.24	5.2
5.3	5.83	5.883	5.936	5.989	6.042	6.095	6.148	6.201	6.254	6.307	6.36	5.3
5.4	5.94	5.994	6.048	6.102	6.156	6.210	6.264	6.318	6.372	6.426	6.48	5.4
5.5	6.05	6.105	6.160	6.215	6.270	6.325	6.380	6.435	6.490	6.545	6.60	5.5

# RELATIVE VALUE TABLE.

TEST.	PRICE OF MILK PER 100 POUNDS, IN CENTS.																			TEST.
	37	38	39	40	40	41	41	42	43	43	43	44	44	45	45	46	46	47	48	
3.0	37	38	39	40	40	41	41	42	43	43	43	44	44	45	45	46	46	47	48	48
3.1	39	39	40	41	42	43	44	45	46	46	47	48	48	49	49	50	50	51	51	52
3.2	40	41	42	43	44	45	46	47	48	48	49	50	50	51	52	53	53	54	54	55
3.3	41	42	43	44	45	46	47	48	49	49	50	51	52	53	54	55	55	56	56	57
3.4	42	43	44	45	46	47	48	49	50	50	51	52	53	54	55	56	57	58	58	59
3.5	44	45	46	47	48	49	50	51	52	52	53	54	55	56	57	58	59	60	60	61
3.6	45	46	47	48	49	50	51	52	53	53	54	55	56	57	58	59	60	61	61	62
3.7	46	47	48	49	50	51	52	53	54	54	55	56	57	58	59	60	61	62	62	63
3.8	47	48	49	50	51	52	53	54	55	55	56	57	58	59	60	61	62	63	64	64
3.9	49	50	51	52	53	54	55	56	57	57	58	59	60	61	62	63	64	65	65	66
<b>4.0</b>	<b>50</b>	<b>51</b>	<b>52</b>	<b>53</b>	<b>54</b>	<b>55</b>	<b>56</b>	<b>57</b>	<b>58</b>	<b>58</b>	<b>59</b>	<b>60</b>	<b>61</b>	<b>62</b>	<b>63</b>	<b>64</b>	<b>65</b>	<b>66</b>	<b>67</b>	<b>68</b>
4.1	51	52	53	54	55	56	57	58	59	59	60	61	62	63	64	65	66	67	68	69
4.2	52	53	54	55	56	57	58	59	60	60	61	62	63	64	65	66	67	68	69	70
4.3	54	55	56	57	58	59	60	61	62	61	62	63	64	65	66	67	68	69	70	71
4.4	55	56	57	58	60	61	62	63	64	64	65	66	67	68	69	70	71	72	73	74
4.5	56	57	58	60	61	62	63	64	65	65	66	67	68	69	70	71	72	73	74	75
4.6	57	59	60	61	62	63	64	65	66	66	67	68	69	70	71	72	73	74	75	76
4.7	59	60	61	62	63	64	65	66	67	67	68	69	70	71	72	73	74	75	76	77
4.8	60	61	62	64	65	66	67	69	70	70	71	72	73	74	75	76	77	78	79	80
4.9	61	62	64	65	66	67	69	70	71	71	72	73	74	75	76	77	78	80	81	82
5.0	62	64	65	66	67	69	70	71	73	73	74	75	76	77	79	80	81	82	84	85
5.1	64	65	66	67	69	70	71	73	74	74	75	76	78	79	81	82	83	84	86	87
5.2	65	66	68	69	70	71	73	74	75	75	77	78	80	81	82	83	84	86	87	88
5.3	66	67	69	70	71	73	74	76	77	77	78	80	81	82	83	84	86	87	89	90
5.4	67	69	70	71	73	74	76	77	78	80	81	82	84	85	86	88	89	90	92	93
5.5	69	70	71	73	74	76	77	78	80	81	83	84	85	87	88	89	91	92	94	95
5.6	70	71	73	74	76	77	78	80	81	83	84	85	87	88	90	91	93	94	95	97
5.7	71	73	74	75	77	78	80	81	83	84	85	87	88	90	91	93	94	96	97	98
5.8	72	74	75	77	78	80	81	83	84	85	87	88	90	91	93	94	96	99	99	100
5.9	74	75	77	78	80	81	83	84	85	87	88	90	91	93	94	96	99	100	102	102

# RELATIVE VALUE TABLE.

TEST.		PRICE OF MILK PER 100 POUNDS, IN CENTS.																		TEST.		
3.0	67	66	65	64	64	63	62	61	61	60	59	58	58	57	56	55	55	54	53	52	67	3.0
3.1	69	68	67	67	66	65	64	63	63	62	61	60	60	59	58	57	56	56	55	54	69	3.1
3.2	71	70	70	69	68	67	66	65	65	64	63	62	62	61	60	59	58	58	57	56	71	3.2
3.3	73	73	72	72	71	70	69	68	69	68	67	66	65	64	63	62	61	61	60	59	73	3.3
3.4	76	75	74	74	73	72	71	70	71	70	69	68	67	66	65	64	63	63	62	61	76	3.4
3.5	78	77	76	75	74	73	72	71	72	71	70	69	68	67	66	65	64	64	63	62	78	3.5
3.6	80	79	78	77	76	75	74	73	74	73	72	71	70	69	68	67	67	66	65	64	80	3.6
3.7	82	81	80	79	78	77	76	75	76	75	74	73	72	71	70	69	68	67	66	65	82	3.7
3.8	84	84	83	82	81	80	79	78	79	78	77	76	75	74	73	72	71	71	70	69	84	3.8
3.9	87	86	85	84	83	82	81	80	81	80	79	78	77	76	75	74	73	73	72	71	87	3.9
4.0	89	88	87	86	85	84	83	82	83	82	81	80	79	78	77	76	75	74	73	72	89	4.0
4.1	91	90	89	88	87	86	85	84	85	84	83	82	81	80	79	78	77	77	76	75	91	4.1
4.2	93	92	91	90	89	88	87	86	87	86	85	84	83	82	81	80	79	78	77	76	93	4.2
4.3	96	95	93	92	91	90	89	88	89	88	87	86	85	84	83	82	81	80	79	78	96	4.3
4.4	98	97	96	95	94	93	92	91	92	91	90	89	88	87	86	85	84	83	82	81	98	4.4
4.5	100	99	98	97	96	94	93	92	93	92	91	90	89	88	87	86	85	84	83	82	100	4.5
4.6	102	101	100	99	98	97	95	94	95	94	93	92	91	90	89	88	87	86	85	84	102	4.6
4.7	104	103	102	101	100	99	98	96	97	96	95	94	93	92	91	90	89	88	87	86	104	4.7
4.8	107	106	104	103	102	101	100	98	99	98	97	96	95	94	93	92	91	90	89	88	107	4.8
4.9	109	108	106	105	104	103	102	100	101	100	99	98	97	96	95	94	93	92	91	90	109	4.9
5.0	111	110	109	107	106	105	104	102	103	102	101	100	99	98	97	96	95	94	93	92	111	5.0
5.1	113	112	111	110	108	107	106	104	105	104	103	102	101	100	99	98	97	96	95	94	113	5.1
5.2	116	114	113	112	110	109	108	107	107	106	105	104	103	102	101	100	99	98	97	96	116	5.2
5.3	118	117	115	114	113	111	110	109	109	108	107	106	105	104	103	102	101	100	99	98	118	5.3
5.4	120	119	117	116	115	113	112	111	111	110	109	108	107	106	105	104	103	102	101	100	120	5.4
5.5	122	121	120	118	117	115	114	112	113	112	111	110	109	108	107	106	105	104	103	102	122	5.5
5.6	125	123	122	120	119	118	116	115	115	114	113	112	111	110	109	108	107	106	105	104	125	5.6
5.7	127	125	124	122	121	119	118	117	117	116	115	114	113	112	111	110	109	108	107	106	127	5.7
5.8	129	128	126	124	123	121	120	119	119	118	117	116	115	114	113	112	111	110	109	108	129	5.8
5.9	131	130	128	127	125	124	122	121	121	120	119	118	117	116	115	114	113	112	111	110	131	5.9

**RELATIVE VALUE TABLE.**

TEST.		PRICE OF MILK PER 100 POUNDS, IN CENTS.																	TEST.		
3.0	67	68	69	70	70	71	72	73	73	74	75	76	76	77	78	79	79	80	81	82	
3.1	70	70	71	72	73	74	74	75	76	77	77	78	79	80	81	82	83	84	85	86	87
3.2	72	73	74	74	75	76	77	78	78	79	80	81	82	83	84	85	86	87	88	89	91
3.3	74	75	76	77	78	78	79	80	81	82	82	83	84	85	86	87	88	89	90	92	93
3.4	76	77	78	79	80	81	82	84	85	86	87	88	89	90	91	92	93	94	94	94	96
3.5	79	80	81	82	85	85	86	87	88	89	90	91	92	93	94	95	96	97	99	100	102
3.6	81	82	83	84	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	103	104
3.7	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	101	102	103	104	107
3.8	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	107
3.9	88	89	90	91	92	93	94	94	95	96	97	98	99	100	101	102	103	104	105	107	107
4.0	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110
4.1	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	113
4.2	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	112	113	115
4.3	97	98	99	100	101	102	103	104	105	106	107	108	110	111	112	113	114	115	116	118	118
4.4	99	100	101	102	103	104	106	107	108	109	110	111	112	113	114	115	117	118	119	121	121
4.5	101	102	103	105	106	107	108	109	110	111	112	114	115	116	117	118	119	120	121	124	124
4.6	103	105	106	107	108	109	110	111	113	114	115	116	117	118	119	120	121	122	123	124	126
4.7	106	107	108	109	110	112	113	114	115	116	117	119	120	121	122	124	125	126	127	129	129
4.8	108	109	110	112	113	114	115	116	118	119	120	121	122	124	125	126	127	128	130	132	132
4.9	110	111	113	114	115	116	119	120	121	121	122	124	125	126	127	129	130	131	132	135	135
5.0	112	114	115	116	117	119	120	121	122	124	125	126	127	129	130	131	132	134	135	137	137
5.1	115	116	117	118	120	121	122	124	125	126	127	129	130	131	133	134	135	136	138	140	140
5.2	117	118	120	121	122	123	125	126	127	129	130	131	133	134	135	136	138	139	140	143	143
5.3	119	120	122	123	124	126	127	128	130	131	132	134	135	136	138	139	140	142	143	146	146
5.4	121	125	124	125	127	128	130	131	132	134	135	136	138	139	140	142	143	144	146	148	148
5.5	124	125	126	128	129	131	132	133	135	136	137	139	140	142	143	144	146	147	148	151	151
5.6	126	127	129	130	132	133	134	136	137	139	140	141	143	144	145	148	149	150	151	154	154
5.7	128	130	131	132	134	135	137	138	140	141	142	144	145	147	148	150	151	152	154	157	157
5.8	130	132	133	135	136	137	139	141	142	143	145	146	148	149	151	152	155	155	157	159	159
5.9	133	134	136	137	139	140	142	143	144	146	147	149	150	152	153	155	158	158	159	162	162







637.116

1.069

1.069

Schoenman, Adolph

Autor Butter fat and dividend  
calculator

Título

Nº cons	Assinatura	Data



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