

# FACIT 1004

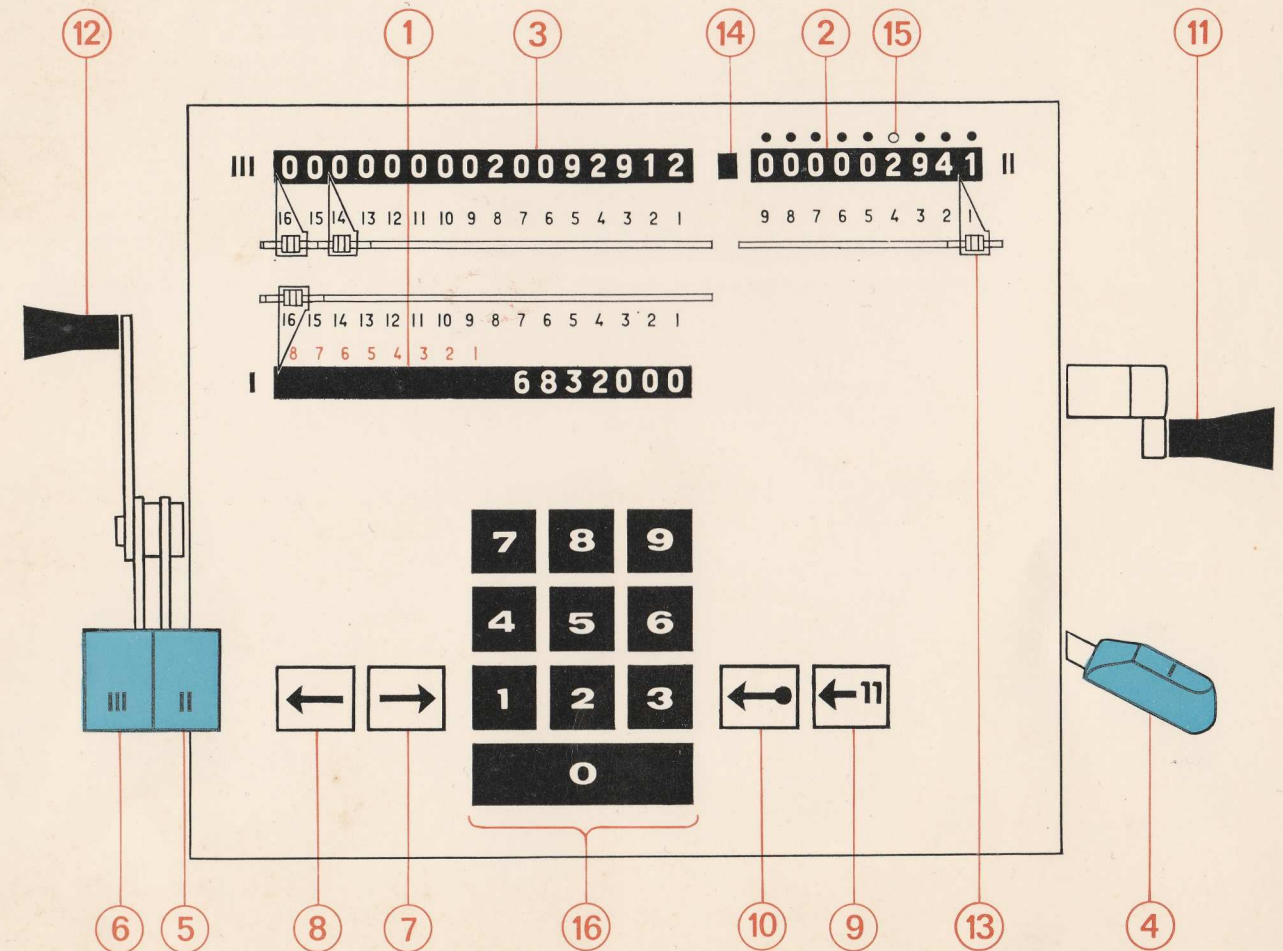
The Facit 1004 is designed to help you in your day-to-day figure work. It is so easy to use that you will acquire speed and accuracy after only an hour or so of practice. To simplify the learning process, this manual provides a number of examples in which the Facit symbol system is used to explain every sequence of operations. The folding spread illustrates the 1004 and explains the functions of its various controls. Read this text carefully and memorize the symbols which will later be used in the examples. Have the machine in front of you as you read the instruction book.



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# FACIT 1004



6832000 I

① **Register I** (setting register — capacity 16 digits) immediately shows every number entered on the setting keys.

00002941 II

② **Register II** (multiplier register — capacity 9 digits) shows the answer (quotient) in division. It shows the number of items in addition, and the multiplier in multiplication.

000000020092912 III

③ **Register III** (product register — capacity 16 digits) shows the answer in multiplication, addition and subtraction, as well as any remainder in division.



④ The **clearing lever** for register I.



⑤ The **clearing lever** for register II.



⑥ The **clearing lever** for register III.



⑦ The **right-hand shift key** moves the number in register I to the right one step at a time.



⑧ The **left-hand shift key** moves the number in register I to the left one step at a time.



⑨ **Tabulating key 11** moves the set-up or back-transferred number to the 11th unit position.



⑩ **Tabulating keys** moves the set-up of back-transferred number to the extreme left — in direct position for division.



⑪ The **crank** is kept in pulled-out position for turning. It enables you to perform all arithmetic operations as soon as the given numbers are entered in the machine.



a) In the examples, black figures indicate the number of **plus** turns.



b) Similarly, red figures indicate the number of **minus** turns.



c) This symbol means that you first turn the crank an inch in a plus direction, after which you make the specified number of minus turns.



d) This symbol tells you that the bell will ring after so many minus turns in a division. You then make one plus turn and the bell rings again. (The bell is shown in black for plus turns.)



⑫ The **back-transfer lever** moves a number from register III or II to register I and in so doing clears the first two registers automatically. When transferring from register III, make sure that the first figure in register I appears directly beneath the first figure in register III. If not, press the left-hand shift key until the figures are in alignment.



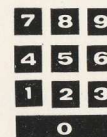
⑬ The **decimal indicators** are movable.



⑭ The **revolution direction indicator** shows whether the machine is set for plus (black) or minus (red) operation.



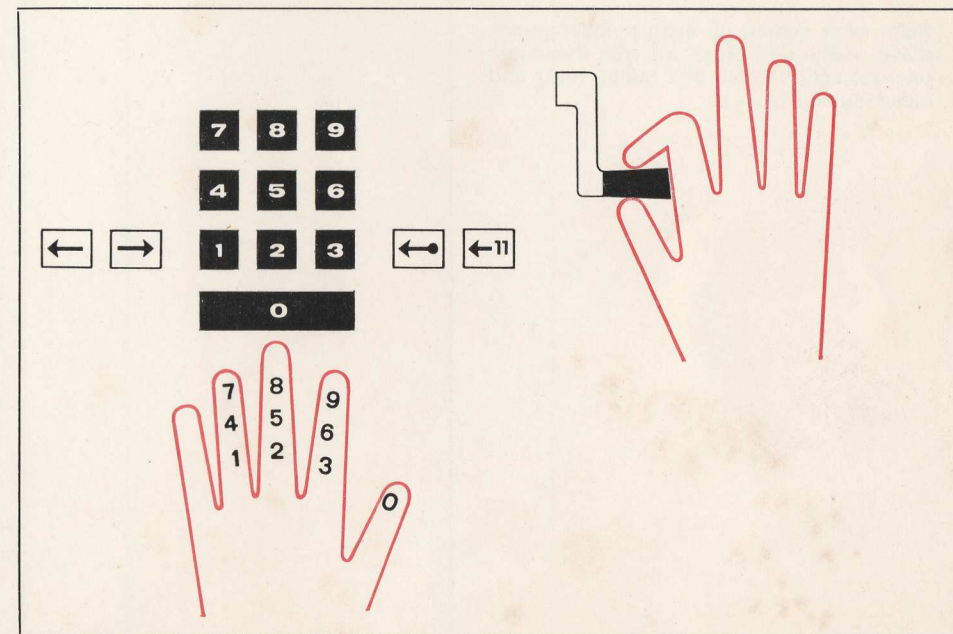
⑮ The **position indicator** shows a white mark above register II, pointing to the unit column in which the machine is operating.



⑯ The **setting keys** are used to enter numbers one digit at a time in the same order in which they are read.

### Fingering chart

Speed and ease of operation will be increased by use of the touch method. Crank with the right hand.

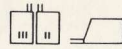


**PART I BASIC EXAMPLES**

**Addition and subtraction**

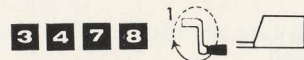
Example:  $3478 + 394 + 85 - 132 = ?$

Clear the machine.



0000000000000000 0000000000

Operation.



Register III shows the answer.



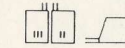
00000000000003825 III

**Rule:** After setting up each number in addition, make one plus turn with the crank (in subtraction make one minus turn) and clear register I.

**Multiplication**

Example:  $6943259 \times 2043 = ?$

Clear the machine.

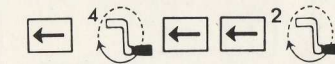


0000000000000000 0000000000

Operation.



Register III shows the answer (product).



0000014185078137 III

Check both numbers.

6943259000 I

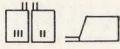
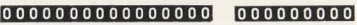
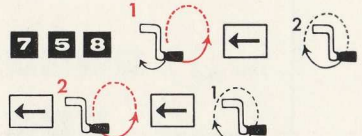


000002043 II

**Rule:** Set up the larger number. Crank the figures of the smaller number into register II. Begin with the unit figure: 1 plus turn for a "one", 2 plus turns for a "two", and so on. Shift the machine one step for each successive figure column.

### Shortcut multiplication

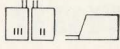
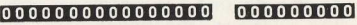
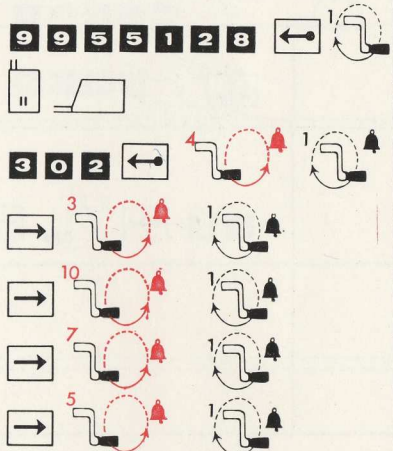

Example:  $758 \times 819 = ?$

An average of 40 % in time can be saved in a multiplication by alternating plus and minus turns. Make plus turns when multiplying by figures from 1 to 5, and minus turns when multiplying by figures from 6 to 9. The following example requires only six turns of the crank, as compared with 18 if only plus turns had been made.

Clear the machine.		
Operation.*		
Register III shows the product.		
Register II shows the second factor.		
* To retain plus operation in spite of minus turns, first move the crank about 3/4 in. in the plus direction. This is necessary only for the first figure of a number in shortcut multiplication.	In plus (positive) multiplication, the revolution direction indicator must always show black.	

### Division

Example:  $9955128 : 302 = ?$   
dividend divisor quotient

Clear the machine.		
Operation.		
Register II shows the answer (quotient). Register III shows remainder, if any.		
<b>Rule:</b> Set up the dividend, tabulate and make one plus turn. Clear registers I and II. Set up the divisor and tabulate. Make minus turns with the crank until the bell rings, followed by one plus turn, when the bell will ring again. Shift. Proceed in the same manner until the required number of figures appears in register II.	Revolution direction indicator must <b>always</b> show red in division.	

**Division by multiplication**

Example:  $672 : 28 = ?$

Division can be performed in either of two ways. We have already described the more usual method, but can you also perform a division by multiplying the divisor repeatedly until a number equal to the dividend is obtained. An advantage of this method is that the dividend, the divisor and the answer appear in their respective registers.

Clear the machine.		0000000000000000 0000000000
Operation. Register II shows the answer.		240000000 II
Register III shows the dividend.		6720000000000000 III
Register I shows the divisor.		28000000000 I

**Placing the decimal point**

Example:  $27.9 - 14.325 + 5.18 = ?$

**Addition and subtraction**

Operation.		
Register III shows the result.		000000000018755 III 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1
<b>Rule:</b> See that you enter each item with the same number of decimals. Start with the number having the most decimals and add as many zeros as needed to the other numbers.		

**Placing the decimal point**

Example:  $18.9 \times 536.78 = ?$

**Multiplication**

Operation.		
Register III shows the product.		000000010145142 III 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1
<b>Rule:</b> No. of decimals in register I (first factor) + No. of decimals in register II (second factor) = No. of decimals in register III (product)		

**Placing the decimal point**

**Division**

Example:  $2.34 : 1.3 = ?$

<p>Operation. Place decimal point in register III.</p>		
<p>Operation. Place decimal point in register I. Read off decimals on the red scale.</p>		
<p>Place decimal point in register II (<math>15 - 7 = 8</math>).</p>		
<p>Operation.  Register II shows answer.</p>		
<p><b>Rule:</b> The number of decimals in register III (dividend)          — the number of decimals in register I (red scale) (divisor)          = the number of decimals in register II (quotient)</p>		

**Placing the decimal point**

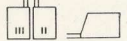


**Division when the divisor is less than 1**

Example:  $18.09 : 0.003 = ?$

<p>Set up 1809 and the 3 without any preceding zeros. Tabulate, but do not start the division. Place decimal point in register III.</p>	<p>1809 : 3</p>	
<p>Register I shows 8 visible decimals on the red scale + 2 zeros that were not entered.</p>		
<p>Perform the division. Register II shows the answer.</p>	<p>:</p>	
<p><b>Placing the decimal point</b> <b>Reciprocals</b></p>		
<p>Set up both numbers and tabulate, but do not start the division. Place decimal point in register III and register I.</p>	<p>1 : 29041</p>	
<p>Perform the division. Register II shows the answer (reciprocal).</p>	<p>:</p>	
<p>Since register II has room for no more than nine digits, you are three decimals short. The missing decimals are always zeros and are placed before the result in register II. Write down these zeros first and then the remaining figures. The answer is then 0.00034434075.</p>		
<p>To obtain the reciprocal of an answer produced in the machine, see page 21.</p>		

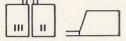
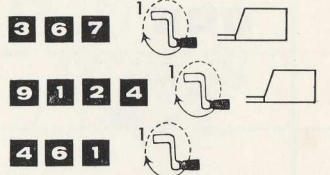
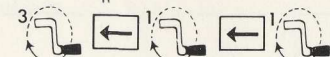
**Continued multiplication**

Example:  $927 \times 12 \times 311 = ?$

Clear the machine.		0000000000000000 0000000000 ████████████████████
Operation. Register III shows the first product.		0000000000011124 III
Back-transfer product to register I.* Multiply by 311. Register III shows answer.		0000000003459564 III
<p>* <b>Note:</b> If register III contains more digits than register I, press the left-hand shift key the appropriate number of times before back-transferring product, in this case <b>once</b>.</p>		

**Addition followed by multiplication**

Example:  $(367 + 9124 + 461) \times 113 = ?$

Clear the machine.		0000000000000000 0000000000 ████████████████████
Operation.  Register III shows the total.		0000000000009952 III
Back-transfer the total to register I. Multiply by 113. Register III shows the answer.		000000001124576 III



<b>Multiplication followed by division</b>		Example: $(921 \times 512) : 2786 = ?$
<b>Alt. 1</b> (Answer is to include decimals.) Clear the machine.		0000000000000000 0000000000 ████████████████████
Operation. Register III shows the product.		00000000000471552 III
Operation. Divide by 2786 in the usual manner. Register II shows the answer with decimals.		169257717 II
<b>Alt. 2</b> (Only integers required in answer.) Clear the machine.		0000000000000000 0000000000 ████████████████████
Operation. Register III shows the product.		00000000000471552 III
Operation. Shift the set-up number to left as many steps as needed to bring the first digits in register III and I into alignment. Perform division in the usual manner.		000000169 II

<b>Division followed by multiplication of the quotient</b>		Example: $(5687 : 4) \times 341 = ?$
Clear the machine.		0000000000000000 0000000000 ████████████████████
Divide in the usual manner. Register II shows the quotient.	5687 : 4	142175000 II
Operation. Multiply by 341 in the usual manner. Register III shows the answer.		000048481675000 III
<b>Simultaneous multiplication of two small numbers</b>		Example: a) $5 \times 1675 = ?$ b) $95 \times 1675 = ?$
Clear the machine.		0000000000000000 0000000000 ████████████████████
The following method may be used to advantage when two small numbers are to be multiplied by the same factor:  Set up 5 and as many zeros as the register capacity (11 digits) allows while leaving room to set up 95 at the end. Multiply the two numbers simultaneously by 1675. Register III shows product a) = 8375 at left and product b) = 159125 at right.	50000000095  × 1675	008375000159125 III
See also next page: multiplication by a constant factor.		

**Multiplication by a constant factor**

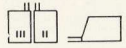
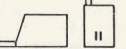
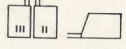

Example: a)  $418 \times 311 = ?$   
 b)  $418 \times 403 = ?$   
 c)  $418 \times 521 = ?$


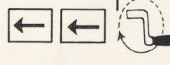
Clear the machine.		0000000000000000 0000000000 
Operation a): Set up 418 and multiply by 311. Register III shows answer a).	418 × 311	0000000000 129998 III
Operation b): Do not clear the machine. Change the number in register II (311) to 403, using the crank and the right-hand shift key. Register III shows answer b).		0000000000 168454 III
Operation c): Do not clear the machine. Change the number in register II (403) to 521, using the crank and the left-hand shift key. Register III shows answer c).		0000000000 217778 III
<b>Rule:</b> Perform the entire operation with the constant factor in register I. After each multiplication change the number in register II to the next one by plus and minus turns and shifting to left or right. If the digits in the various factors vary greatly, it is advisable to clear registers III and II between multiplications.		

**Subtraction below zero**  
 = credit balance

Example:  $58923 - 93470 + 8463 = ?$

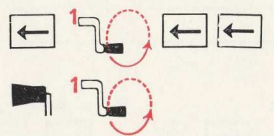
Clear the machine.		0000000000000000 0000000000 
Operation. Register III shows the result. The nines preceding the number signify a negative quantity. Next step is to produce the correct numerical value.		0000000000 9999999999973916 III
Back-transfer. Register I now shows two nines preceding the number.		9973916 I
Operation. Register III shows the answer. Due to the two nines preceding the number in register I, the answer is preceded by two zeros. The credit balance is 26084.		9999999999 0026084 III

<b>Multiplication followed by addition of products</b>		Example: $2495 \times 374$ $4694 \times 38$ = ?
Clear the machine.		0000000000000000 0000000000
Multiply. Clear registers I and II, causing the products in register III to be added.	$2495 \times 374$ 	00000000000933130 III
Multiply. Register III shows the sum of the two multiplications.	$4694 \times 38$	0000000001111502 III
<b>Negative multiplication</b>		Example: $+ 825 \times 265$ $- 140 \times 200$ = ?
Clear the machine.		0000000000000000 0000000000
Multiply. Clear registers I and II.	$825 \times 265$ 	00000000000218625 III
Perform the next multiplication, $140 \times 200$ , with negative turns, causing the new product to the subtracted from the total in register III. Register III shows the answer.	$140 \times 200$	0000000000190625 III

<b>PART II PRACTICAL EXAMPLES</b>		
<b>Computation of discounts</b>		Example: $1675.00$ Discount 5 % = ? Net amount = ?
Operation. Point off 2 decimals. The discount appears in register III.	$1675 \times 5$	000000000008375 III
Change the figure 5 in register II to the complement of 5 ( $100 - 5 = 95$ ). The net amount appears in register III.		0000000000159125 III
<b>Rule:</b> When both discount and net amounts are required, multiply the gross by the discount rate and then by the complement of the discount rate.	<b>Note:</b> If only the net amount is required, multiply direct by the complement.	
<b>Addition of percentage</b>		Example: $125.25$ Add 5 % = ? Final amount = ?
Operation. Point off 4 decimals. The percentage to be added appears in register III.	$12525 \times 5$	0000000000062625 III
Change the figure 5 in register II to 105 ( $5 + 100$ ). The final amount appears in register III.		00000000001315125 III
<b>Rule:</b> When both the amount of percentage increment and the final amount are required, multiply the original amount by the percentage and then by the percentage + 100.	<b>Note:</b> If only the final amount is required, multiply direct by the percentage to be added + 100.	

**Computation of discounts**  
when discount rate contains several decimals

Example:  $764.36$   
Discount 12.23 % = ?  
Net amount = ?

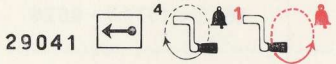
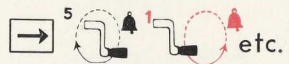
<p>Set up the gross price 76436 and multiply by 1223. Do not clear the registers. Point off 6 decimals. The discount is 93.48.</p>	<p>76436 × 1223</p>	<p>000000093481228 III</p>
<p>Shift one step to the left to bring number of decimals in alignment. Make a minus turn and shift two steps to the left*. Back-transfer the number to register I and make one minus turn. The amount is 670.88.</p>		<p>9999900670878772 III</p>
<p>* These two shifts correspond to the 2 nines used in subtraction below zero, so as to produce zeros between the answer and the other nines in the register.</p>		
<p><b>Rule:</b> Multiply the gross amount by rate of discount. The amount of discount appears in register III. Shift the gross to bring its decimals in alignment with those of the discount. Make one minus turn, causing the complement of the net to appear in register III. Shift and back-transfer the number to register I. After one minus turn, the net amount appears on right-hand side of register III.</p>		

**Chain discounts**

Example:  $7564.84 - 5\% - 14\% + 3\% = ?$

<p>First work out the chain-discount factor. Multiply the chain discount complements by each other (<math>100 - 5 = 95</math>, <math>100 - 14 = 86</math>) and the increment <math>+ 100</math> (<math>3 + 100 = 103</math>). The chain-discount factor is 0.84151 after 6 decimals have been pointed off in register III (two decimals for each percentage).</p>	<p>95 × 86 × 103</p>	<p>00000000841510 III</p>
<p>Back-transfer the chain-discount factor to register I and multiply by the gross. (If several numbers are subject to the same chain discounts, use the chain-discount factor as a constant number.) After 8 decimals are pointed off, the total of 6365.89 appears in register III.</p>	<p>× 756484</p>	<p>0000636588850840 III</p>
<p><b>Rule:</b> The total is obtained by multiplying the amount by the discount complement and the increment <math>+ 100</math>. If the same chain discounts occur frequently, use the discount factor as a constant number.</p> <p>If the same chain discounts occur frequently, work can be simplified by compiling a table of them.</p>		


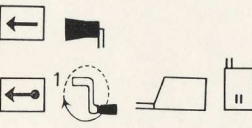

<b>Setting prices</b>		Example: $3.45 + 12\% = ?$ $5.75 + 12\% = ?$ $4.60 + 12\% = ?$
<b>Increase</b>		
Increasing the prices by 12 % means that the new prices will be 112 % of the old ones. Use 112 as a constant number and multiply by each of the old prices. (See page 14: Multiplication by a constant factor.) Register III shows $3.45 + 12\%$	$112 \times 345$	000000000038640 III
Register III shows $5.75 + 12\%$	$\times 575$	0000000000064400 III
Register III shows $4.60 + 12\%$	$\times 460$	0000000000051520 III
<b>Decrease</b>		
Example: $2.76 - 15\% = ?$ $4.60 - 15\% = ?$ $5.75 - 15\% = ?$		
Decreasing the prices by 15 % means that the new prices will be 85 % of the old ones. Use 85 as a constant number when multiplying by the old prices. (See page 14: Multiplication by a constant factor.) Register III shows $2.76 - 15\%$	$85 \times 276$	0000000000023460 III
Register III shows $4.60 - 15\%$	$\times 460$	0000000000039100 III
Register III shows $5.75 - 15\%$	$\times 575$	0000000000048875 III
<b>Rule:</b> To increase several prices by the same percentage, multiply 100 plus the percentage rate by the old prices. To decrease several prices by the same percentage, multiply 100 minus the percentage rate by the old prices.		

<b>Reciprocals</b>		Example: $1 : 29041 = ?$
The reciprocal of a number is 1 divided by that number. It may be determined by ordinary division, but the simplest method is the following:		
Set up 29041. Press the tabulator key once to move the number in register I to the extreme left, then make plus turns till the bell rings, followed by one minus turn.	29041 	300000000 II
Press the right-hand shift key once. Make plus turns till the bell rings, then one minus turn. Proceed in this manner until register II is filled with figures. Register II shows the answer.		344340759 II
<b>Decimal rule:</b>		
Add as many zeros in front of the number as there are integers in the original number. The first of these zeros is always the integer zero. In the example our reciprocal is 0.0000344340759.		
<b>Rule:</b> Set up the number and tabulate. Make plus turns till the bells rings, then one minus turn, shift to the right, and continue in this way until the required number of figures is obtained.		

<b>Percentage distribution</b>		Example:
<b>Divisor recurring in several divisions</b>		Find the percentage distribution of the grand total over the following sub-totals:
		a) \$ 5,672.00 = ? % b) 13,743.00 = ? % c) 9,626.00 = ? % = ? = 100 %
Add all the sub-totals. Do not clear the machine after the last addition. Register III shows the grand total.	5672 + 13743 + 9626	000000000029041 III
The grand total is the constant number by which each amount should be divided. These divisions can be performed easiest by finding the reciprocal of the constant and multiplying by it. Back-transfer the number and tabulate. Compute the reciprocal (see previous page). (0.0000344340759).		344340759 II
Clear register I. Back-transfer and press the tabulating key 11. Multiply the amounts by the reciprocal (13 decimals in the reciprocal less two as the number is to be expressed in % = 11 decimals). Register III shows answer a) = 19.53 %.		0001953100785048 III
Register III shows answer b) = 47.32 %.	* 13743	0004732275050937 III
Register III shows answer c) = 33.15 %.	* 9626	0003314624146134 III
(19.53 % + 47.32 % + 33.15 % = 100.00 %)		
<b>Rule:</b> Add the amounts, back-transfer the total and compute the reciprocal. Back-transfer this and multiply it by the various amounts. Check that the sum of the percentages adds up to 100 %.		

<b>Percentage of increase or decrease</b>		Example:
<b>Increase and decrease in dollars and percent</b>		Current turnover Dollars 36942 6389
	Previous turnover Dollars 25896 10385	Increase/ Decrease Dollars % = ? = ? = ? = ?
<b>For an increase:</b> Set up 36942, tabulate and make a plus turn. Clear register I. Set up 25896, tabulate and make a minus turn. Amount of increase appears in register III.		1104600000000000 III
Clear register II, as it is set up for plus operation from previous additions. Perform a division without entering numbers afresh. Percentage of increase appears in register II.		042655236 II
<b>For a decrease:</b> Set up 06389 (a zero is entered in front of the number because the dividend must have the same number of integers as the divisor), tabulate and make a minus turn. Clear register I. Set up 10385, tabulate and make a plus turn. Amount of decrease appears in register III.		0399600000000000 III
Start the division without clearing. Percentage of decrease appears in register II.		038478574 II
<b>Rule:</b> Add the current turnover and subtract the previous turnover in the left-hand side of the machine and then divide the remainder in register III by the previous turnover in register I.		

<b>British currency</b>		Example: $3.75 \times \text{£}5.7.10 = ?$
<b>Multiplication</b>		
Using the table on page 30, convert 7 shilling and 10 pence to decimals of 1 pound (0.39167). The total amount is then 5.39167. Multiply this number by 3.75. The answer appears in register III.	$539167 \times 375$	<b>000000202187625 III</b>
There are 20 whole pounds. The decimals are to be converted into shillings and pence. Consult the table on page 30 for the approximate value of the decimals, 0.2187625. The nearest number is 0.22083, corresponding to 4 shillings and 5 pence. The answer is then £20.4.5.		
<b>Division</b>		Example: $\frac{\text{£}17.10.10}{\text{£}148.16.5} = ? \%$
Using the table on page 30 convert the shillings and pence to decimals of a pound. Divide. The answer, expressed as a percentage, appears in register II.	$1754167 : 14882083$	<b>117871066 II</b>
<b>Rule:</b> Use the decimal method in multiplications and divisions involving British currency. Consult the table when converting to decimal fractions.		

<b>Computation of interest</b>		Example: What is the interest on 2,784.45 for 147 days at $5\frac{1}{2}\%$ ?
<b>Continued multiplication with subsequent division</b>		$\frac{2784.45 \times 147 \times 5.5}{360 \times 100} = ?$
<b>Alt. 1:</b> Multiply 278445 by 147.	$278445 \times 147$	<b>000000040931415 III</b>
Back-transfer product to register I and multiply by 55.	 $\times 55$	<b>000002251227825 III</b>
Press left-hand shift key once. Back-transfer product to register I. Press the tabulating key and make one plus turn. Clear registers I and II. Set up 36, tabulate and divide in the ordinary manner. The interest is 62.53.	 $: 36$ 	<b>062534106 II</b>
<b>Alt. 2:</b> The above example may be worked out by continued multiplication: $2784.45 \times 147 \times 5.5 \times 0.000027778$ (the reciprocal of the divisor 36000 computed to 5 figures). The interest is 62.53 after decimals are pointed off.	$278445 \times 147 \times 55 \times$ $0000027778$	<b>0062534606522850 III</b>
<b>Rule: Alt. 1:</b> Compute the dividend by continued multiplication. Divide the product by 36000.		
<b>Alt. 2:</b> Compute the interest by means of continued multiplication.		

**Elimination in back-transfer**

Example:  $28.17 \times 32.53 \times 56.43 \times 2.75 = ?$

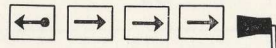
**Continued multiplication**

Multiply  $28.17 \times 32.53$  in the usual manner. Register III shows the answer. (Two digits are to be eliminated.)

$2817 \times 3253$

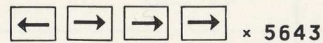
000000009163701 III

Tabulate, then shift to the right until the last digit of register I is positioned immediately to the left of the digits to be eliminated. Back-transfer.



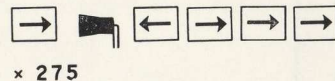
After a back-transfer, the right-hand shift key is always locked. To unlock, press the left-hand shift key.

Shift one step to the left and then as many steps to the right as possible. Multiply by 5643. Register III shows the answer.



0000000517107591 III

Shift and eliminate 2 digits. Back-transfer and shift. Multiply by 275. Register III shows the answer.



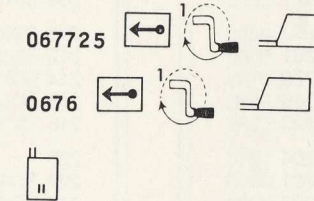
0000001422045625 III

**Square roots**

Example:  $\sqrt{677.25} = ?$

**when no more than 5 correct digits are required in the answer**

Add the square (677.25) and the closest number (0676) from the  $\sqrt{\text{Number}}$  column in the table on pages 28—29. If the first digit of the square is 5 or higher, it should be preceded by a zero on being set up in the machine, in this case 0677.25. Addition is performed in the left-hand side of the machine. Clear register II.



Divide by the number in the table on the right of 0676. To find this number, consult the "odd" column if the square has an odd number of integers, the "even" column if it has an even number of integers. In this case we consult the "odd" column and the number is 5200000. The square root appears in register II. As a rule, this method produces at least 5 correct digits in the answer. Here the answer is 26.024.

:52

026024038 II

**Decimal rule**

- 1—2 integers in the square = 1 integer in the root
- 3—4 integers in the square = 2 integers in the root
- 5—6 integers in the square = 3 integers in the root

If the square contains no integers	Consult this column	Position the decimal indicators as below
0...	even	0...
0.0...	odd	0...
0.00...	even	0.0...
0.000...	odd	0.0...
0.0000...	even	0.00...



Table of square roots      The division factor for square roots

$\sqrt{\text{Number}}$	Odd	Even
100	2000000	6324556
102	2019901	6387488
104	2039608	6449807
106	2059127	6511529
108	2078461	6572671
110	2097618	6633250
112	2116602	6693281
114	2135416	6752778
116	2154066	6811755
118	2172557	6870226
120	2190891	6928204
122	2209073	6985701
124	2227106	7042727
126	2244995	7099296
128	2262742	7155418
130	2280351	7211103
132	2297826	7266361
134	2315168	7321203
136	2332381	7375636
138	2349469	7429670
140	2366432	7483315
142	2383276	7536578
144	2400000	7589467
146	2416610	7641990
148	2433106	7694154
150	2449490	7745967
152	2465766	7797436
154	2481935	7848567
156	2498000	7899368
158	2513962	7949843
160	2529823	8000000
162	2545585	8049845
164	2561250	8099383
166	2576820	8148620
168	2592297	8197561
170	2607681	8246212
172	2622976	8294577
174	2638182	8342662
176	2653300	8390471
178	2668333	8438010
180	2683282	8485282
182	2698148	8532292
184	2712932	8579045
186	2727637	8625544
188	2742262	8671794
190	2756810	8717798
192	2771282	8763561
194	2785678	8809087
196	2800000	8854378
198	2814250	8899439

$\sqrt{\text{Number}}$	Odd	Even
200	2828428	8944272
202	2842535	8988883
204	2856572	9033272
206	2870541	9077445
208	2884441	9121404
210	2898276	9165152
212	2912044	9208692
214	2925748	9252025
216	2939388	9295161
218	2952965	9338095
220	2966480	9380832
222	2979933	9423376
224	2993326	9465728
226	3006660	9507892
228	3019934	9549870
230	3033151	9591664
232	3046310	9633276
234	3059412	9674710
236	3072459	9715967
240	3098387	9797959
244	3124100	9879272
248	3149604	9959920
252	3174902	10039921
256	3200000	10119289
260	3224904	10198040
264	3249616	10276187
268	3274142	10353744
272	3298485	10430724
276	3322650	10507145
280	3346641	10583006
284	3370460	10658331
288	3394113	10733127
292	3417602	10807405
296	3440931	10881177
300	3464102	10954452
304	3487120	11027240
308	3509986	11099550
312	3532705	11171393
316	3555278	11242776
320	3577709	11313709
324	3600000	11384200
328	3622155	11454257
332	3644174	11523889
336	3666061	11593102
340	3687818	11661904
344	3709448	11730303
348	3730952	11798305
352	3752333	11865918
356	3773593	11933148

$\sqrt{\text{Number}}$	Odd	Even
360	3794734	12000000
364	3815757	12066483
368	3836666	12132601
372	3857461	12198361
376	3878144	12263768
380	3898718	12328829
384	3919184	12393547
388	3939544	12457930
392	3959798	12521981
396	3979950	12585707
400	4000000	12649111
406	4029889	12743626
412	4059557	12837446
418	4089010	12930584
424	4118253	13023057
430	4147289	13114878
436	4176123	13206060
442	4204760	13296617
448	4233203	13386561
454	4261456	13475905
460	4289523	13564660
466	4317407	13652839
472	4345113	13740452
478	4372643	13827509
484	4400000	13914022
490	4427189	14000000
496	4454212	14085453
0502	4481072	14170392
0508	4507772	14254824
0514	4534314	14338759
0520	4560702	14422206
0526	4586938	14505172
0532	4613026	14587667
0538	4638966	14669697
0544	4664762	14751272
0550	4690416	14832397
0556	4715931	14913082
0562	4741308	14993332
0568	4766551	15073155
0574	4791660	15152558
0580	4816638	15231547
0588	4849743	15336232
0596	4882623	15440208
0604	4915283	15543488
0612	4947727	15646086

$\sqrt{\text{Number}}$	Odd	Even
0620	4979960	15748016
0628	5011986	15849291
0636	5043809	15949922
0644	5075432	16049923
0652	5106859	16149304
0660	5138094	16248077
0668	5169140	16346254
0676	5200000	16443844
0684	5230679	16540859
0692	5261179	16637308
0700	5291503	16733201
0708	5321654	16828548
0716	5351636	16923357
0724	5381450	17017638
0732	5411100	17111400
0740	5440589	17204651
0748	5469918	17297399
0756	5499091	17389653
0764	5528110	17481419
0772	5556978	17572707
0780	5585697	17663522
0788	5614268	17753873
0796	5642695	17843767
0804	5670979	17933210
0812	5699123	18022209
0820	5727129	18110771
0830	5761945	18220868
0840	5796551	18330303
0850	5830952	18439089
0860	5865152	18547237
0870	5899153	18654759
0880	5932959	18761664
0890	5966574	18867963
0900	6000000	18973666
0910	6033242	19078785
0920	6066301	19183327
0930	6099181	19287302
0940	6131884	19390720
0950	6164415	19493589
0960	6196774	19595918
0970	6228965	19697716
0980	6260991	19798990
0990	6292854	19899749

Conversion of shillings and pence to decimals of £1

£1 = 20 shillings. 1 shilling = 12 pence.  
 $\frac{1}{4}$  penny = £ 0.00104.  $\frac{1}{2}$  penny = £ 0.00208.  $\frac{3}{4}$  penny = £ 0.00312.

d.	0	1	2	3	4	5	6	7	8	9	10	11
0	0.00	0.00417	0.00833	0.01250	0.01667	0.02083	0.02500	0.02917	0.03333	0.03750	0.04167	0.04583
1	05	05417	05833	06250	06667	07083	07500	07917	08333	08750	09167	09583
2	10	10417	10833	11250	11667	12083	12500	12917	13333	13750	14167	14583
3	15	15417	15833	16250	16667	17083	17500	17917	18333	18750	19167	19583
4	20	20417	20833	21250	21667	22083	22500	22917	23333	23750	24167	24583
5	25	25417	25833	26250	26667	27083	27500	27917	28333	28750	29167	29583
6	30	30417	30833	31250	31667	32083	32500	32917	33333	33750	34167	34583
7	35	35417	35833	36250	36667	37083	37500	37917	38333	38750	39167	39583
8	40	40417	40833	41250	41667	42083	42500	42917	43333	43750	44167	44583
9	45	45417	45833	46250	46667	47083	47500	47917	48333	48750	49167	49583
10	50	50417	50833	51250	51667	52083	52500	52917	53333	53750	54167	54583
11	55	55417	55833	56250	56667	57083	57500	57917	58333	58750	59167	59583
12	60	60417	60833	61250	61667	62083	62500	62917	63333	63750	64167	64583
13	65	65417	65833	66250	66667	67083	67500	67917	68333	68750	69167	69583
14	70	70417	70833	71250	71667	72083	72500	72917	73333	73750	74167	74583
15	75	75417	75833	76250	76667	77083	77500	77917	78333	78750	79167	79583
16	80	80417	80833	81250	81667	82083	82500	82917	83333	83750	84167	84583
17	85	85417	85833	86250	86667	87083	87500	87917	88333	88750	89167	89583
18	90	90417	90833	91250	91667	92083	92500	92917	93333	93750	94167	94583
19	95	95417	95833	96250	96667	97083	97500	97917	98333	98750	99167	99583

Conversion of common fractions to decimal fractions

		4ths, 8ths, 16ths, 32nds								6ths, 12ths					
	$\frac{1}{4}$	$\frac{1}{8}$	$\frac{1}{16}$	$\frac{1}{32}$		$\frac{1}{4}$	$\frac{1}{8}$	$\frac{1}{16}$	$\frac{1}{32}$		$\frac{1}{6}$	$\frac{1}{12}$			
				1	0.03125		2	4	8	16	0.50000		1	0.08333	
			1	2	06250				9	17	53125		1	2	16667
				3	09375					19	59375		2	4	33333
		1	2	5	15625		5			21	65625		3	6	50000
				3	18750				11	23	68750		4	8	66667
				7	21875					25	78125		5	10	83333
	1			9	28125		3			27	84375		11	11	91667
			5	11	34375					29	90625				
				13	40625					31	96875				
			7	15	46875			7							
		3			37500										
					43750				15						
					46875										

Interest divisor table

	%	0	$\frac{1}{4}$	$\frac{1}{2}$	$\frac{3}{4}$
			144.000.000	72 000.000	48 000.000
1		36 000.000	28 800 000	24 000.000	20 571.429
2		18 000.000	16 000.000	14 400.000	13 090.909
3		12 000.000	11 076.923	10.285.714	9 600.000
4		9 000.000	8 470.588	8 000.000	7 578.947
5		7 200.000	6 857.143	6 545.455	6 260.870
6		6 000.000	5 760.000	5 538.462	5 333.333
7		5 142.875	4 965.517	4 800.000	4 645.161
8		4 500.000	4 363.636	4 235.294	4 114.286
9		4 000.000	3 891.892	3 789.474	3 692.308
10		3 600.000	3 512.195	3 428.571	3 348.837
11		3 272.727	3 200.000	3 130.435	3 063.830
12		3 000.000	2 938.776	2 880.000	2 823.529
13		2 769.231	2 716.981	2 666.667	2 618.182
14		2 571.429	2 526.316	2 482.759	2 440.678
15		2 400.000	2 360.656	2 322.581	2 285.714

1 year = 360 days

**Conversion of metric system to British  
measures, and vice versa**

According to British Standard 350  
In each case multiply by factor given

**Length**

Millimetres to inches	0.0393701	Inches to millimetres	25.4
Centimetres to inches	0.393701	Inches to centimetres	2.54
Metres to feet	3.28084	Feet to metres	0.3048
Metres to yards	1.09361	Yards to metres	0.9144
Kilometres to yards	1093.61	Yards to kilometres	0.0009144
Kilometres to miles	0.621371	Miles to kilometres	1.609344

**Area**

Square centimetres to square inches	0.155000	Square inches to square centimetres	6.4516
Square metres to square feet	10.7639	Square feet to square metres	0.0929030
Square metres to square yards	1.19599	Square yards to square metres	0.836127
Square kilometres to square miles	0.386102	Square miles to square kilometres	2.58999
Hectares to acres	2.47105	Acres to hectares	0.404686

$\pi$  = ratio of circumference to diameter = 3.1415927

$1/\pi$  = ratio of diameter to circumference = 0.3183099

**Capacity**

Litres to Imp. pints	1.75975	Imp. pints to litres	0.568261
Litres to U.S. pints	2.113376	U.S. pints to litres	0.473176
Litres to Imp. quarts	0.879877	Imp. quarts to litres	1.13652
Litres to U.S. quarts	1.056688	U.S. quarts to litres	0.94635
Litres to Imp. gallons	0.219969	Imp. gallons to litres	4.54609
Litres to U.S. gallons	0.264172	U.S. gallons to litres	3.78541
Hectolitres to Imp. gallons	21.9969	Imp. gallons to hectolitres	0.0454609
Cubic centimetres to cubic inches	0.0610237	Cubic inches to cubic centimetres	16.3871
Cubic metres to cubic feet	35.3147	Cubic feet to cubic metres	0.0283168
Cubic metres to cubic yards	1.30795	Cubic yards to cubic metres	0.764555

**Weight**

Grams to grains	15.4324	Grains to grams	0.0647989
Grams to ounces	0.0352740	Ounces to grams	28.3495
Grams to pounds	0.00220462	Pounds to grams	453.59237
Kilograms to pounds	2.20462	Pounds to kilograms	0.45359237
Kilograms to Imp. cwts.	0.0196841	Imp. cwts. to kilograms	50.8023
Kilograms to long tons	0.000984207	Long tons to kilograms	1016.05
Kilograms to short tons	0.00110231	Short tons to kilograms	907.185

**Service  
and  
care**



The Facit 1004 is designed and constructed for many years of perfect operation.

The Facit 1004 differs from most calculators in that it is fully enclosed and protected from dust. However, as lubricating oil wears thin, machine parts will wear. Thus lubrication, cleaning and adjustment are occasionally necessary, just as on any machine. This work is carried out and guaranteed by your nearest Facit workshop.

