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olivetti

Instructions for the use of the

Divisumma 24

superautomatic printing calculator

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Foreword

The Olivetti Divisumma 24 is a superautomatic printing calculator with one register and a dynamic memory. It is designed to add, subtract, multiply, and divide at high speed, and to calculate negative (or credit) balances.

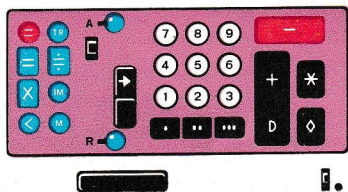
Automatic controls allow any of the four operations to be linked directly to others, in any sequence. In this way a wide variety of chain calculations can be quickly and simply carried out.

For example:

- calculations involving a constant addend or subtrahend;
- positive or negative multiplications involving a constant factor;
- calculations requiring the automatic re-entry of products or totals for further multiplication (volumes, powers, factorials, etc.);
- fully automatic divisions requiring the retention of the quotient for further use.

Each stage and result of a calculation is printed on a tally roll. This, besides providing a permanent record of the calculation, allows accuracy to be checked, on the spot or at a later date and in a different place.

This manual contains, as well as full operating instructions for the machine, additional information for the benefit of the operator, examples of some typical applications of the machine, and a set of tables for values and conversions frequently required in day-by-day calculation.





Entry keys

The Divisumma 24 keyboard contains nine round keys for entering the digits 1 to 9, and three rectangular keys for entering single, double and triple zeros.

Clearing the machine


Before beginning a fresh series of calculations always check that the machine is clear.



To do this, depress key : the symbol  will then be printed, indicating that the machine is clear.

Entering an amount

To enter an amount on the keyboard, simply depress the keys which correspond to the digits in the amount in the same order as you would write them (i.e., from left to right). The machine automatically arranges them in their respective columns.

Correcting an entry

If you realise that you have made a mistake in figure entry, you can cancel the entry by depressing the keyboard clearing key .

If you wish to correct only the last digit entered, depress the back space key ; this key cancels only the last digit. By depressing the back-space key  again, you can cancel the next-to-last-digit entered, and so on.

Capacity of the machine

The entering capacity of the machine is 12 digits: 999,999,999,999. The totalling capacity of the machine is 13 digits: 9,999,999,999,999.

Column indicator

While an amount is being entered, as many dots as there are digits so far entered appear in the window on the front of the top cover. For easier reading these dots are arranged in groups of three, with the appropriate number underneath.

Credit balance signal

At the foot of the column indicator there is a small signal which shows white when there is a negative (or credit) balance in the register of the machine.



The basic operations

ADDITION

Example: $123 + 15 = 138$

123 +
15 +
138 T

Enter the first amount by depressing in order keys ① ② ③, and then depress the addition key $\frac{+}{D}$ (or the bar $\frac{+}{D}$).

Enter the second amount ④ ⑤ and depress the addition key $\frac{+}{D}$ again.

Depress the total key $\frac{*}{T}$: the result, 138, is printed in red together with symbol T.

SUBTRACTION

Example: $321 - 301 = 20$

321 +
301 -
20 T

Enter the first amount, 321, and depress key $\frac{+}{D}$.

Enter the second amount, 301, and depress the subtraction key $\frac{-}{D}$.

Depress key $\frac{*}{T}$, which causes the difference between the amounts - i.e., 20 - to be printed.

Sub-total (running total)

Example:

25,000
+ 1,500
—
= 26,500
— 500
+ 800
—
= 26,800

25000 +
1500 +
26500 S

Depress keys ② ⑤ $\frac{+}{D}$ and then key $\frac{+}{D}$.

Depress keys ① ⑤ $\frac{-}{D}$ and then key $\frac{+}{D}$.

Depress the sub-total (running total) key $\frac{D}{S}$: the running total, 26,500, is printed with the symbol S and retained in the register of the machine.

Complete the calculation by subtracting 500 and adding 800, and then - to obtain the final result and to clear the machine for the next calculation - depressing the full total key $\frac{*}{T}$.

500 -
800 +
26800 T

CREDIT BALANCE

The machine is equipped to find a true negative (or credit) balance, and so to carry out automatically any kind of algebraic calculation.

The credit balance, which is indicated by the credit balance signal already referred to, is designated on the tally roll by the symbol c (credit) printed alongside the T or S symbols.

Example: $50 - 85 = - 35$

Enter 50 and depress key $\frac{+}{D}$.

Enter 85 and depress key $\frac{-}{D}$.

Depress key $\frac{*}{T}$: the credit balance, 35, is printed with the symbols c T.

50 +
85 -
35c T

Printing of figures and symbols

- amounts added or subtracted are printed in blue (or black) with the symbols + or -;

- totals and sub-totals, both positive and negative, are printed in red with the appropriate symbols. They are followed by an automatic double line spacing to mark off the end of one calculation from the beginning of the next.



Repeat lever

If an amount has to be added or subtracted more than once in succession, to avoid re-entering it each time « hold » it on the keyboard by using the repeat lever.

When you have entered the amount concerned, move the repeat lever to the left towards the position marked « R ». Add or subtract the amount the required number of times, and then, at the end of the sequence, depress either the total or the sub-total key: the result is then printed, and the repeat lever automatically returned to its « off » position.

Example:

$$\begin{array}{r}
 125 \\
 + 250 \\
 + 250 \\
 + 250 \\
 \hline
 \text{Result} = 875
 \end{array}$$

125 +
 250 +
 250 +
 250 +
 875 T

Enter 125 and depress key

Enter 250, engage the repeat lever, and depress key three times.

Depress key : the result, 875, is printed, and the repeat lever automatically returns to its « off » position.

Where the repeat sequence is to be followed by other additions or subtractions, the repeated amount can be cancelled either by depression of the sub-total key or (if it is preferred that the sub-total should not be printed) by depression of the keyboard clearing key and the manual return of the repeat lever to its « off » position.

Static memory

It is important to realise that the Divisumma 24 can « hold » an amount



on the keyboard even when a total or sub-total operation is carried out. For this simply hold the repeat lever in the « on » position manually while you depress the total or sub-total key. This feature (the « static memory ») is particularly useful for working out arithmetical progression and other similar calculations.

Printing of amounts without calculation (reference numbers)

To print a reference number, simply enter the number (e.g., 123) on the keyboard and depress the non-add key : the number is printed on the tally roll, together with the symbol < to indicate that the register of the machine has not been involved in the operation.

123 <

Date key

To print the date automatically, simply:

- depress the date key , and then;
- depress any of the motor control keys.

The particular date to be printed is selected, at the beginning of each day, by manual positioning of the four date printing wheels situated to the left of the numerical printing wheels.

At the side is shown an addition calculation with the date printed alongside the result. To obtain this, simply carry out the additions and then depress the date key before the final depression of the total key .

Obviously this feature can be used to print, instead of the date, other

123 +
 456 +
 258 +
 82.10 837 T

constant reference numbers: the number of the machine operator, the number of the machine itself (where several machines are in use), etc.

DYNAMIC MEMORY

A - Transferring an amount entered on the keyboard into the dynamic memory.

125 × <

Enter an amount (e.g. 125) on the keyboard and depress key **X**.

The amount, 125, is received in the machine's dynamic memory, automatically cancelling any amount that may have been held there previously. Of the two symbols printed alongside the amount on the tally roll, the < indicates that the register has not been involved in the operation, and the × that the dynamic memory has been involved.

As any amount received in the register automatically cancels the amount previously held there, the operator has no need to worry about clearing the dynamic memory at any stage. Nevertheless it is worth noting that, if key **X** is depressed when there is no amount entered on the keyboard the dynamic memory is cleared.

At any point in a calculation the contents of the dynamic memory can be read. To do this depress in order the preselector key **M** and the non-add key **<**.

125 × <

The contents of the dynamic memory are then printed in red, as shown at the side.

B - Simultaneous transfer of an amount into the dynamic memory and into the register for addition or subtraction.

Enter an amount (e.g., 123), depress the preselector key **IM**, and then depress the addition or subtraction key according to the operation to be carried out.

123 × +

For example:

- simultaneous transfer into the dynamic memory and into the register (in addition):

depress first key **IM** and then key **+_D**;

123 × -

- simultaneous transfer into the dynamic memory and into the register (in subtraction):

depress first key **IM** and then key **-**.

C - Transferring a total or sub-total into the dynamic memory.

The transfer of a total or sub-total into the dynamic memory, which is known as the « automatic re-entry of totals », allows a result or partial result to be stored in the dynamic memory ready for further calculation (e.g., to be multiplied by another amount).

Example: $12 + 15 + 20 = 47$

(to be stored in the dynamic memory)

Enter and add the individual amounts using key **+_D**, depress the preselector key **IM**, and then depress key ***_T**: the register is cleared and the result, 47, is transferred into the

12 +
15 +
20 +
47 × T

memory. The symbols printed alongside identify the operation that has been carried out.

D - Recalling an amount from the dynamic memory.

Depress in order the preselector key **M** and the **+D** or **-D** key as required.

In the last section we transferred the amount 47 into the dynamic memory. If we now wish to recall this amount for addition in the register, we can do so by depressing in order keys **M** and **+D**. The machine prints the amount 47 and the symbols **+ +**.

47 × +

47 × -

By depressing keys **M** and **-D** instead, we can recall the amount from the dynamic memory for subtraction in the register.

E - Printing of amounts transferred into or recalled from the dynamic memory.

The printing of amounts in operations involving the dynamic memory is as follows:

- amounts entered on the keyboard which are simultaneously transferred into the dynamic memory and into the register are printed in blue (or black);
- amounts which are transferred from the register into the dynamic memory are printed in red;
- amounts which are recalled from the dynamic memory and added or subtracted in the register are printed in red.

123 × +

123 × T

123 × +

123 × -

MULTIPLICATION

A - Positive multiplication (automatic clearing of the product).

When a multiplication is carried out, the product obtained at the end of the operation will normally be retained in the register. To find out what the product is and to clear it from the register, depress key **X**. However, there is a special control on the Divisumma 24 which allows the automatic printing and clearing of the product. This control is the automatic total printing lever at the top of the keyboard towards the left-hand side: by moving it to the left (i.e., to position «A») before beginning the multiplication, the machine can be preselected to print the product and clear it from the register at the end of the operation automatically.



Example: $12 \times 1,234 = 14,808$

Enter the first factor, 12, and depress key **X** (1).

Enter the second factor, 1,234, and depress key **=**.

On the tally roll, the factors are printed in blue (or black) and the product in red. For clearer and easier reading, the machine does not print any intermediate terms.

B - Constant factor.

The first factor entered on the keyboard (e.g., 12 in the previous ex-

(1) The first factor entered is treated by the machine as the multiplier. For this reason it is advisable, wherever practicable, to enter the small factor first, so that less machine cycles are involved in the operation.

ample) is transferred into the dynamic memory by means of the key.

This amount is then stored in the dynamic memory, even after the product has been printed and cleared from the register, and so can be employed - without re-entry - in a whole series of multiplications involving a constant factor.

In this way, once the constant factor has been entered and transferred into the memory, the series of multiplications can be carried out with only the variable factors needing to be entered each time.

Example:

$$\begin{aligned} 12 \times 1,234 &= 14,808 \\ 12 \times 1,580 &= 18,960 \\ 12 \times 2,620 &= 31,440 \end{aligned}$$

12 x <
1234 =
14808 T
1580 =
18960 T
2620 =
31440 T

Check that the automatic total printing lever is in position « A », enter 12, and depress key \times .

Enter 1,234 and depress key $=$.

The machine carries out the first multiplication, printing the product 14,808 and clearing it from the register.

The factor, 12, remains in the dynamic memory, however, so that by entering 1,580 and depressing key $=$ you can at once obtain the second product, 18,960. Proceed in the same way to obtain the third product.

C - Automatic sub-total.

The Divisumma 24 can be used to accumulate successive products if the small lever below the keyboard on the right-hand side is engaged (i.e., is moved into the « down » position).

This automatic sub-total lever func-

tions only when the automatic total printing lever is also engaged; but when the two levers are engaged together, the progressive total of products is printed after each multiplication.

Example:

$$\begin{array}{r} (12 \times 12) \\ + (123 \times 1,450) \\ + (15 \times 456) \\ \hline = 185,334 \end{array}$$

Check that the automatic total printing lever and the automatic sub-total lever are both engaged.

Enter 12 and depress key \times .

Enter 12 and depress key $=$. The product, 144, is obtained and printed as a sub-total.

Enter 123 and depress key \times .

Enter 1,450 and depress key $=$.

The sum of the products of the two multiplications so far carried out, 178,494, is obtained and again printed as a sub-total.

Enter 15 and depress key \times .

Enter 456 and depress key $=$. The required sum of the products of all three multiplications is obtained and printed as a sub-total: 185,334.

To clear the register depress key \times .

12 x <
12 =
144 S
123 x <
1450 =
178494 S
15 x <
456 =
185334 S
185334 T

D - Automatic re-entry of a product (chain multiplication).

There is a device on the Divisumma 24 which makes possible the automatic re-entry of a product (i.e., the automatic transfer of a product from the register to the dynamic memory). For example, to perform the calculation $3 \times 5 \times 12$, we have first to carry out the multiplication $3 \times 5 = 15$ and then to transfer this product into the dynamic





$$\begin{array}{r} 3 \times < \\ 5 = \\ 15 \times T \end{array}$$

$$\begin{array}{r} 12 = \\ 180 T \end{array}$$

memory to be multiplied in its turn by 12, before we can obtain the final result: 180.

For this it is not necessary to re-enter the product 15 on the keyboard for transfer into the memory, nor even to make use of the pre-selector key **IM**. The procedure is, in fact, as follows:

Check that the automatic total printing lever is engaged, and the automatic sub-total lever disengaged.

Enter 3 and depress key **X**.

Enter 5 and depress key **TR**. The product, 15, is printed, together with the symbol \times to indicate that it has been automatically transferred into the dynamic memory.

Enter 12 and depress key **=**. The required result, 180, is obtained and printed.

If more than three factors are concerned in the chain multiplication, the **TR** key should be used in place of the **=** key for all but the last operation.

E - Negative multiplication.

« Negative multiplication » is the term used to designate an operation by which a product is subtracted from an amount which is already in the register, or which is to be accumulated in the register at a later stage in the calculation.

On the Divisumma 24 this negative multiplication is achieved automatically by use of the **=** key in place of the **=** key.

Example:

$$2,000 + 3,300 - (23 \times 45) = 4,265$$

Enter 2,000 and depress key **+**.

Enter 3,300 and depress key **+**.

Enter 23 and depress key **X**.

Enter 45 and depress key **=**.

The symbol \times is printed alongside the second factor to indicate the negative multiplication, and the result, 4,265, is obtained and printed in the normal manner.

F - Capacity of the machine in multiplication.

The Divisumma 24 can carry out in a single operation any multiplication in which: (a) the digits of the factors concerned come to a total of not more than 13, when the left-hand digit of the factor transferred into the dynamic memory is less than 5 (i.e., is 1, 2, 3 or 4); or (b) the digits of the factors concerned make a total of not more than 12, when the left-hand digit of the factor transferred into the dynamic memory is 5 or more.

Example:

$$\begin{array}{r} (13 \text{ digits}) \\ \times \quad 1,234,567,891 \\ \hline = 519,713,082,111 \end{array}$$

$$\begin{array}{r} (12 \text{ digits}) \\ \times \quad 895,451,232 \\ \hline = 488,916,372,672 \end{array}$$

The Divisumma 24 automatically informs the operator when the multiplication being attempted exceeds this capacity: when the **=**, **TR** or **=** key is depressed, the machine remains inoperative. To unlock the keys and clear the keyboard, simply depress the clearing key **■**.

$$\begin{array}{r} 2000 + \\ 3300 + \\ 23 \times < \\ 45 \times \\ \hline 4265 T \end{array}$$

$$\begin{array}{r} 421 \times < \\ 1234567891 = \\ \hline 519753082111 T \end{array}$$

$$\begin{array}{r} 546 \times < \\ 895451232 = \\ \hline 488916372672 T \end{array}$$

In practice, however, there is no limit to the size of multiplication that can be carried out on the Divisumma 24: there is a simple method whereby multiplications that exceed this capacity may be carried out.

Example:

$$\begin{array}{r} \\ \\ \times \\ \hline = 57,637,741,789,272,280 \end{array}$$

Check that the automatic total printing lever is engaged, and the automatic sub-total lever disengaged.

Enter the smaller factor, 4,521,368, and depress key \times .

Enter the first six digits (reading from the right) of the second factor, i.e., 854,585, and depress key $=$.

Ignoring the first six digits (reading from the right) of the product printed (i.e., the same number of digits as were entered from the second factor), enter the remaining digits, 3,863,893, and depress key $\frac{1}{b}$.

Enter the remaining digits from the left of the second factor, 12,747, and depress key $=$. To this second product obtained, 57,637,741,789, add the last six digits of the first product obtained, 272,280, to give the final result: 57,637,741,789,272,280.

DIVISION

Example:

$$\begin{array}{r} 5,560 \\ 42 \\ \hline = 132 \text{ (remainder 16)} \end{array}$$

Check that the automatic total printing lever is engaged, and the automatic sub-total lever disengaged.

Enter 5,560 and depress key $\frac{1}{b}$.

Enter 42 and depress key $=$.

The machine carries out the division automatically by first reprinting the dividend (in red) as a check ⁽¹⁾, and then printing, at the end of the operative cycles, the divisor, the quotient, and the remainder, in that order ⁽²⁾.

The engagement of the automatic total printing lever causes both the quotient and the remainder to be printed and cleared from the register; if it is left disengaged before the beginning of the division, only the quotient is printed, and the remainder is left in the register for further use or for manual clearance (by depression of key \times).

Automatic retention of the quotient and its uses

At the end of a division operation the quotient is stored automatically in the dynamic memory, ready for

⁽¹⁾ By reprinting the dividend in red, the Divisumma 24 provides visible proof of the accuracy of the calculation. This means that, if the register is not clear if the operator forgets to clear it, the error becomes immediately obvious. More importantly, it also means that if the dividend in a particular calculation is the sum of a series of additions or the product from a previous calculation, the value of this sum or product is automatically made known by its being printed as the dividend.

⁽²⁾ If you wish to stop the machine in the middle of a division (e.g. because the dividend reprinting shows that the register was not clear beforehand, or because an answer accurate to a sufficient number of decimal places will already have been obtained), depress key \leftarrow . This causes the machine to print the dividend as calculated to that point, followed by the remainder.

A 

4521368 × <
854585 =
3863893272280 T

3863893 +
12747 =
57637741789 T

T
5560 +
5560 :
42 :
132 T
16 T

1245 +
 1245 :
 12 :
 103 T
 9 T

15 =
 1545 T

1250 +
 1250 :
 12 :
 104 T
 2 T

104 × +
 104 :
 6 :
 17 T
 2 T

12636 +
 12636 :
 78 :
 162 T
 T

162 × +
 293 +
 455 T

immediate use in a subsequent operation.

1st Example:
$$\frac{1,245}{12} \times 15 = 1,545$$

Check that the automatic total printing lever is engaged, and the automatic sub-total lever disengaged.

Carry out the division operation as before. Enter 15 and depress key $\frac{\square}{\square}$: the required answer, 1,545, is obtained and printed.

2nd Example:
$$\frac{1,250}{12} : 6 = 17$$

Carry out the first division operation. Depress the preselector key

M followed by key $\frac{+}{\text{D}}$ to transfer the quotient, 104, still stored in the dynamic memory, to the register. Enter 6 and depress key $\frac{\square}{\square}$: the required answer, 17, is obtained and printed.

3rd Example:
$$\frac{12,636}{78} + 293 = 455$$

Carry out the division operation. Depress the preselector key M followed by key $\frac{+}{\text{D}}$, and then enter and add 293. Finally depress key $\frac{\square}{\square}$: the required answer, 455, is obtained and printed.

DETERMINING THE POSITION OF THE DECIMAL POINT

Multiplication

In multiplication the product will have as many decimal places as there are decimal places in the

multiplier and multiplicand taken together.

Example:
$$\begin{aligned} 3.23 \times 12 &= 38.76 \\ 3.23 \times 12.15 &= 39.2445 \end{aligned}$$

In chain multiplications the principle remains the same: the number of decimal places in the product will be equal to the sum of decimal places in all the factors.

Example:
$$1.07 \times 0.98 \times 1.41 \times 729 = 1,077.845454$$

Division

Quotient: in division, the number of decimal places in the quotient will be equal to the number of decimal places in the dividend less the number in the divisor.

Remainder: in division, the number of decimal places in the remainder will be the same as the number in the dividend.

Two different types of case arise:

- where the dividend is larger than the divisor;
- where the dividend is smaller than the divisor.

a) where the dividend is larger than the divisor

1 - If neither the dividend nor the divisor has decimal places, the quotient will not have decimal places.

If, despite this, decimal places are required in the quotient, add as many zeros to the dividend as there are decimal places required in the quotient.

Example:
$$1,450 - 13$$

 (two decimal places are required in the quotient).

323 × <
 12 =
 3876 T

323 × <
 1215 =
 392445 T

107 × <
 98 =
 10486 × T

141 =
 1478526 × T

729 =
 1077845454 T

145000 +
 145000 :
 13 :
 11153 T
 11 T

Enter 1,450 followed by 00 and depress key $\frac{+}{D}$.

Enter 13 and depress key $\frac{=}{\square}$.
 The quotient and remainder printed should be read as 111.53 and 0.11 respectively.

2 - Both the dividend and the divisor have decimal places, and the quotient is required with decimal places.

In this case, zeros must be added to either the dividend or the divisor as it is entered so that the number of decimal places in the dividend less the number of decimal places in the divisor is equal to the number of decimal places required in the quotient.

Example: $145.2 : 12.5$
(two decimal places are required in the quotient).

Enter 145.2 followed by 00 and depress key $\frac{+}{D}$.

Enter 12.5 and depress key $\frac{=}{\square}$.
 The quotient and remainder printed should be read as 11.61 and 0.075 respectively.

b) where the dividend is smaller than the divisor

Where the dividend is smaller than the divisor, zeros must be added to the dividend entered as necessary (at least as many zeros as there are digits in the divisor). The number of decimal places in the quotient will then be, as before, equal to the number of decimal places in the dividend less the number in the divisor.

Example: $5.2 : 234.6$

Enter 5.2 followed by 00 00 and depress key $\frac{+}{D}$.

Enter 234.6 and depress key $\frac{=}{\square}$.
 The quotient and remainder printed should be read as 0.0221 and 0.01534 respectively.

520000 +
 520000 :
 2346 :
 221 T
 1534 T

Some typical applications

PRELIMINARY NOTE

In the « Application » section which follows it should be assumed, in the absence of any specific indication to the contrary, that the automatic total printing lever is engaged and the automatic sub-total lever disengaged.

Whenever a particular operation requires a different positioning of one or both of these control levers, this will be clearly indicated.

ADDITION AND SUBTRACTION

Adding a constant amount to a series of different amounts

Example:

$$\begin{array}{r} 1,748 + 478 = 2,226 \\ 344 + 478 = 822 \\ 871 + 478 = 1,349 \end{array}$$

Enter 1,748 and depress key $\frac{+}{D}$.
 Enter 478, depress the preselector key $\frac{IM}{\square}$, and then key $\frac{+}{D}$.

Depress key $\frac{\times}{\square}$: the first answer, 2,226 is obtained and printed.

1748 +
 478 \times +
 2226 T

145200 +
 145200 :
 125 :
 1161 T
 75 T

344 +
478 × +
822 T

871 +
478 × +
1349 T

Enter 344 and depress key $\frac{+}{D}$.
Depress the preselector key \textcircled{M} and then key $\frac{+}{D}$.

Depress key \times : the second answer, 822, is obtained and printed.
Carry out the third and any subsequent additions in the same way as the second.

Subtracting a constant amount from a series of different amounts

Example:

Calculate a series of net weights given the individual gross weights and a constant tare weight.

Gross weight	Tare weight	Net weight
145	62	83
186	62	124
209	62	147

145 +
62 × -
83 T

186 +
62 × -
124 T

209 +
62 × -
147 T

Enter 145 and depress key $\frac{+}{D}$.
Enter 62, depress the preselector key \textcircled{M} , and then key $-$.
Depress key \times : the first net weight, 83, is obtained and printed.

Enter 186 and depress key $\frac{+}{D}$.
Depress the preselector key \textcircled{M} followed by key $-$.

Depress key \times : the second net weight, 124, is obtained and printed.
Carry out the third and any subsequent operations in the same way as the second.

Series of addition sequences with individual totals and a grand total

Example:

123 +	423 +	27 +	
140 +	12 +	144 +	
1,930 +	893 +	4,220 +	
2,193 +	1,328 +	4,391	= 7,912

Enter and add 123, 140, and 1,930.
Depress the preselector key \textcircled{M} and then key \times : the first total, 2,193, is printed and stored in the dynamic memory.

Enter and add 423, 12, and 893.
Depress key $\frac{+}{D}$: the second total, 1,328, is printed.
Depress the preselector key \textcircled{M} and then key $\frac{+}{D}$.

Depress the preselector key \textcircled{M} and then key \times : the progressive total is printed and stored in the dynamic memory.

Enter and add 27, 144, and 4,220.
Depress key $\frac{+}{D}$: the third total, 4,391, is printed.

Depress the preselector key \textcircled{M} and then key $\frac{+}{D}$.

Depress key \times : the progressive total, 7,912, is printed as the grand total of the three addition sequences.

MULTIPLICATION

Calculating discounts and percentage increases

Because of the large number of automatic devices on the Divisumma 24, percentages – whether discounts or percentage increases – can be carried out in several different ways.

Discounts

1 - The gross amount is multiplied as a constant factor, first by the discount rate and then by the complement of the rate to 100.

1st Example:

Discount 1,430 by 7% to show both the value of the discount and the discounted (net) amount.

123 +
140 +
1930 +
2193 × T

423 +
12 +
893 +
1328 S

2193 × +
3521 × T

27 +
144 +
4220 +
4391 S

3521 × +
7912 T

1430 × <
7 =
10010 T

93 =
132990 T

Enter 1,430 and depress key **X**.
Enter 7 and depress key **=**: the discount printed should be read as 100.10.
Enter 93 (the complement of 7 to 100) and depress key **=**: the net amount printed should be read as 1,329.90.

NOTE:

Since we are here dealing with percentages, it will be obvious that the answers printed must be divided mentally by 100.

2 - By a different procedure the decimal places can be eliminated.

2nd Example:

Discount 1,430 by 7 %.

1430 × <
7 =
10010 T

1430 × +
100 -
1330 T

Enter 1,430 and depress key **X**.
Enter 7 and depress key **=**: the discount printed should again be read as 100.10.

Depress consecutively keys **M** and **+D**.

Enter the value of the discount less its decimal places, 100, and depress key **=**.

Depress key **X**: the net amount, 1,330, is printed without decimal places.

3 - The discount and the net amount can be obtained simultaneously by a single multiplication. This method is particularly suitable for cases where different amounts require to be discounted by the same rate.

3rd Example:

Discount the following amounts by 7 %: 1,430 and 2,745.

Enter 93, a « bridge » of five zeros, and 7 (93 000 00 7) and depress key **X**.

Enter 1,430 and depress key **=**: the answer printed should be read as the net amount, 1,329.90, followed by

93000007 × <
1430 =
132990010010 T

2745 =
255285019215 T

the value of the discount, 100.10.
Enter 2,745 and depress key **=**: the answer printed should be read as the net amount, 2,552.85, followed by the value of the discount, 192.15.

Percentage increases

1 - The amount to be increased is multiplied by the rate of increase and by the rate of increase plus 100.

1st Example:

Increase 1,430 by 15 % to show both the value of the increase and the increased amount.

Enter 1,430 and depress key **X**.
Enter 15 and depress key **=**: the percentage increase printed should be read as 214.50.

Enter 115 (15 + 100) and depress key **=**: the increased amount printed should be read as 1,644.50.

1430 × <
15 =
21450 T

115 =
16450 T

2 - By a different procedure the decimal places can be omitted.

2nd Example:

Increase 1,430 by 15 %.

Enter 1,430 and depress key **X**.
Enter 15 and depress key **=**: the percentage increase printed should again be read as 214.50.

Depress consecutively keys **M** and **+D**.

Enter 215 (the percentage increase rounded off to be nearest whole number) and depress key **+D**.

Depress key **X**: the increased amount printed should be read as 1,645.

1430 × <
15 =
21450 T

1430 × +
215 +
1645 T

3 - The percentage increase and the increased amount can be obtained simultaneously by a single multiplication. This method is particularly suitable for cases

where different amounts require to be increased by the same rate.

3rd Example:

Increase the following amounts by 12%: 2,127, 5,850 and 3,425.

Enter 112, a « bridge » of four zeros, and 12 (112 00 00 12) and depress key \times .

Enter 2,127 and depress key $=$: the answer printed should be read as the increased amount, 2,382.24, followed by the value of the percentage increase, 255.24.

Enter 5,850 and depress key $=$: the answer printed should be read as the increased amount, 6,552, followed by the value of the percentage increase, 702.

Enter 3,425 and depress key $=$: the answer printed should be read as the increased amount, 3,836, followed by the value of the percentage increase, 411.

If there is a whole series of these operations, it will help in the reading of the answers to draw two vertical lines on the tally roll to correspond with the positions of the commas shown here:

1,120000,12.

Chain discount and percentage increase calculations

(Where it is required to show the values both of the discounts and percentage increases and of the discounted and increased amounts).

Example:

Initial amount 13,025

Discount 16 %

Percentage increase 3%

Enter 13,025 and depress key \times .
Enter 16 and depress key $=$: the

discount printed should be read as 2,084.

Enter 84 (the complement of 16 to 100) and depress key TP : the discounted amount printed, which is automatically transferred into the dynamic memory, should be read as 10,941.

Enter 3 and depress key $=$: the percentage increase printed should be read as 328.23.

Enter 103 and depress key $=$: the increased amount printed should be read as 11,269.23, and represents the net amount.

Invoicing

1st Example:

Extend the following invoice:

Quantity	Unit rate	Amount
24	250	6,000
52	175	9,100
Gross amount		15,100
Discount 6 %		
Percentage increase 3.3 %		
Net amount		14,662

Enter 24 and depress key \times .

Enter 250 and depress key $=$: the value of the first extension, 6,000, is printed.

Engage the automatic sub-total lever.

Enter 52 and depress key \times .

Enter 175 and depress key $=$: the value of the second extension, 9,100, is printed.

Enter 6,000 (the value of the first extension) and depress key +D .

Disengage the automatic sub-total lever.

Depress in order keys IM and = : the gross amount of the invoice,

13025 \times <

16 =

208400 T

84 =

1094100 \times T

3 =

3282300 T

103 =

112692300 T

24 \times <

250 =

6000 T

52 \times <

175 =

9100 S

6000 +

15100 \times T

112000012 \times <

2127 =

238224025524 T

5850 =

655200070200 T

3425 =

383600041100 T

6 = 15,100, is printed and transferred into the dynamic memory.
 90600 T Enter 6 and depress key [=]: the discount printed should be read as 906.
 94 = 1419400 T Enter 94 (the complement of 6 to 100) and depress key [X]: the discounted amount printed should be read as 14,194.
 14194 x < 33 = 468402 T Enter 14,194 and depress key [X].
 1033 = 14662402 T Enter 33 and depress key [=]: the percentage increase printed should be read as 468.402.

Enter 103.3 (100 + 3.3) and depress key [=]: the increased amount printed should be read as 14,662.402, and represents the net amount.

2nd Example:

Check the following invoice:

Item	Quantity	Unit Price	Amount
A	320	145	46,400
B	780	27	21,060
C	120	30	3,600
D	500	45	22,500
Gross amount			93,560
Less 12 % discount			11,227
Discounted amount			82,333
Plus 3.3 % sales tax			2,717
Net amount			85,050

Disengage the automatic total printing lever.

Enter 320 and depress key [X].
 Enter 145 and depress key [=].
 Enter 780 and depress key [X].
 Enter 27 and depress key [=].
 Enter 120 and depress key [X].
 Enter 30 and depress key [=].
 Enter 500 and depress key [X].
 Re-engage the automatic total printing lever.
 Enter 45 and depress key [TR]: the gross amount, 93,560, is printed, and

automatically transferred into the dynamic memory.

Enter 88 (the complement of 12 to 100) and depress key [TR]: the discounted amount, 82,332.80, is printed and transferred into the dynamic memory.

Enter 1033.3 (100 + 3.3) and depress key [=]: the net amount is obtained as 85,049.78240, which is of course equivalent to the 85,050 shown on the invoice being checked.

Wages

Example:

168 hours at 230 = 38,640
 40 hours at 300 = 12,000
 20 hours at 350 = 7,000

Gross pay = 57,640

Deductions:

on the gross pay = { 7.00 %
 0.57 %
 0.15 %

on the gross pay less the allowance of 20,000 and less the three preceding deductions = 4.40 %

Carry out the three multiplication operations: hours worked x hourly rate.

Enter and add the three products obtained, and depress in order keys [IM] and [X]: the gross amount, 57,640, is printed, and transferred into the dynamic memory.

Enter in turn the three deduction rates, 700, 57, and 15, depressing key [=] after each entry; the three deductions printed should be read as 4,034.800, 328.5480, and 86.4600 respectively.

Enter in turn these three deductions, rounded off to the nearest unit, depressing key [=] after each entry: 4,035, 329 and 86.

88 = 8233280 x T

1033 = 8504978240 T

168 x < 230 = 38640 T

40 x < 300 = 12000 T

20 x < 350 = 7000 T

38640 + 12000 + 7000 + 57640 x T

700 = 40348000 T

57 = 3285480 T

15 = 864600 T

4035 - 329 - 86 = 4450 S

A ●

320 x < 145 = 780 x < 27 = 120 x < 30 = 500 x < 45 = 93560 x T

57640 × +
 2000 -
 33190 × T

440 =
 14603600 T

57640 +
 4450 -
 1460 -
 51730 T

Depress key \diamond : the total of the three deductions, 4,450, is printed.

Depress in order keys M and D .

Enter 20,000 (the amount of the allowance) and depress key = .

Depress in order keys IM and X .

Enter 440 and depress key = : the fourth deduction printed should be read as 1,460.3600.

Enter the gross pay, 57,640, and depress key D .

Enter 4,450 (the sum of the first three deductions) and depress key = .

Enter 1,460 (the fourth deduction, rounded off to the nearest unit) and depress key = .

Depress key X : the net pay, 51,730, is printed.

CALCULATING SURFACE AREAS AND VOLUMES

Calculating surface areas with the deduction of empty spaces



Example:

Calculate the net wall area of a four-walled room containing two doors and a window.

425 +
 585 +
 445 +
 375 +
 1830 × T

320 =
 585600 S

Disengage the automatic total printing lever, leaving the automatic subtotal lever disengaged as well.

Enter and add the four overall wall lengths (4.25 + 5.85 + 4.45 + 3.75).

Depress in order keys IM and X .

Enter 3.20 (the height of the walls) and depress key = .

Depress key \diamond : the overall wall

area printed should be read as 58,5600 square metres.

Enter 95 and depress key X .

Enter 225 and depress key = : the area of the first door is subtracted from the overall area.

Enter 130 and depress key X .

Enter 225 and depress key = : the area of the second door is subtracted from the overall area.

Engage the automatic total printing lever again.

Enter 190 and depress key X .

Enter 150 and depress key = : the net wall area printed should be read as 50.6475 square metres.

Calculating timber volumes and prices

No of pieces	Height	Width	Length
55	2 cm	22 cm	400 cm
125	3 cm	24 cm	410 cm
65	4 cm	25 cm	415 cm

Price 25,724 per cubic metre.

Enter 2 and depress key X .

Enter 22 and depress key TR .

Enter 400 and depress key TR : the unit volume of the first item should be read as 0.0176 cubic metres (17,600 cubic centimetres).

Enter 55 and depress key = : the total volume of the first item should be read as 0.968 cubic metres.

Carry out the two other multiplication operations in the same way, in each case entering the number of pieces as the last factor so that the unit volumes can be obtained and printed.

Enter and add the total volumes, omitting the last two digits printed: 9,680, 36,900, and 26,975.

95 × <
 225 ×
 130 × <
 225 ×
 190 × <
 150 ×
 506475 T

2 × <
 22 =
 44 × T

400 =
 17600 × T

55 =
 968000 T

3 × <
 24 =
 72 × T

410 =
 29520 × T

125 =
 3690000 T

4 × <
 25 =
 100 × T

415 =
 41500 × T

65 =
 2697500 T

9680 +
 36900 +
 26975 +
 73555 × T
 25724 =
 189212820 T

Depress in order keys **M** and **%**: the grand total of volumes printed should be read as 7.3555 cubic metres.

Enter 25,724 and depress key **=**: the cost of the consignment printed should be read as 189,212.8820.

DIVISION

Interest calculations

Example 1:

Calculate the interest given the following data:

Principal = P = 25,000
 Days = d = 65
 Rate = r = 8 %

The formula that applies is:

$$\text{Interest} = I = \frac{P.d.r.}{36,000}$$

Enter 25,000 and depress key **X**.

Enter 65 and depress key **TR**.

Disengage the automatic total printing lever.

Enter 8 and depress key **=**.

Re-engage the automatic total printing lever.

Enter 36,000 and depress key **=**: the interest, 361, is printed.

Example 2:

Calculate the interest using the shorter formula:

$$I = \frac{C.g.}{D}$$

where $D = 36,000/r.$ = a fixed divisor taken from the table on page 35).

Using the same data as given in example 1:

Disengage the automatic total printing lever.

Enter 25,000 and depress key **X**.

Enter 65 and depress key **=**.

Enter 4,500 (the fixed divisor for 8 % given on page 35) and depress key **=**: the interest, 361, is printed.

Example 3:

Calculate the net receivable amount:

Bill ref.	Amount	Days
1	15,500	30
2	28,000	50
3	42,850	90

Rate = 8 % = (fixed divisor 4,500)

Commission: 120 per bill

Sales tax = 3.3 %

Disengage the automatic total printing lever, leaving the automatic sub-total lever disengaged as well.

Enter and add the amounts: 15,500, 28,000, and 42,850.

Depress key **%**: the gross amount, 86,350, is printed.

Carry out the three multiplication operations: $30 \times 15,500$, $50 \times 28,000$, and $90 \times 42,850$.

Re-engage the automatic total printing lever.

Enter 4,500 (the fixed divisor) and depress key **=**: the interest, 1,271, is printed.

Depress in order keys **M** and **+D**.

Enter 360 (= 3×120 = the total commission on the three bills) and depress key **+D**.

Depress in order keys **M** and **%**. Enter 3.3 and depress key **=**: the sales tax printed should be read as 53.823.

Depress in order keys **M** and **+D**.

Enter 54 (the sales tax rounded off to the nearest unit) and depress key **+D**.

Depress key **◇**: the amount to be deducted, 1,685, is printed.

A ● 

25000 × <
 65 =
 1625000 × T
 8 =
 13000000 :
 36000 :
 361 T
 4000 T

25000 × <
 65 =
 1625000 :
 4500 :
 361 T
 500 T

A ● 

15500 +
 28000 +
 42850 +
 86350 T
 30 × <
 15500 =
 50 × <
 28000 =
 90 × <
 42850 =
 5721500 :
 4500 :
 1271 T
 2000 T
 1271 × +
 360 +
 1631 × T
 33 =
 53823 T
 1631 × +
 54 +
 1685 S
 86350 =
 84665. T

Enter the gross amount, 86,350, and depress key = .

Depress key M : the net receivable amount, 84,655, is printed.

Calculating averages and means

Simple arithmetical averages.

Example 1:

Calculate the average of the following amounts: 475, 620, 744, and 861.

The formula that applies is

$$\text{Average} = \frac{a + b + c + d}{4}$$

Enter and add the four amounts. Enter 4 and depress key = : the average of the four amounts, 675, is printed.

Example 2:

Average price.

Quantity	Unit Price
620 kg	205 per kg
800 kg	285 per kg

$$\text{Average price} = \frac{(620 \times 205) + (800 \times 285)}{(620 + 800)}$$

Disengage the automatic total printing lever, leaving the automatic subtotal lever disengaged as well.

Enter and add the two quantities, and depress key M : the sum of the quantities, 1,420, is printed.

Carry out the two multiplication operations: 620×205 , and 800×285 . Re-engage the automatic total printing lever.

Enter the sum of the quantities, 1,420, and depress key = : the average price, 250, is printed.

Percentages

Example 1:

Discount percentages.

An article whose list price is 18,500 is sold for 16,280: find the percentage discount of the sale price on the list price.

Enter 16,280 00 and depress key +D .

Enter 18,500 and depress key = .

Enter 100 and depress key +D .

Depress in order keys M and = .

Depress key M : the discount percentage required, 12 %, is printed.

Example 2:

Reduction percentages (same as discount percentages).

A piece of material weighing 1,626 kg originally weighs only 1,383 kg after drying: find the percentage loss in weight.

Enter 1,383 00 00 and depress key +D .

Enter 1,626 and depress key = .

Enter 100 00 and depress key +D .

Depress in order keys M and = .

Depress key M : the percentage loss in weight required, 14.95 %, is printed.

(To obtain a percentage to two decimal places simply add four zeros to the dividend - i.e., to the final weight in this example - and find the complement of the quotient to 100 00).

Example 3:

Percentage increases.

Sales turnover was 8,640,500 in 1961, and 9,125,250 in 1962: find the percentage increase of 1962 sales over 1961 sales.

Enter 9,125,250 00 00 (in order to obtain two decimal places in the result) and depress key +D .

A 

1628000 +
1628000 :
18500 :
88 T
T

100 +
88 x -
12 T

13830000 +
13830000 :
1626 :
8705 T
870 T

10000 +
8505 x -
1495 T

9125250000 +
9125250000 :
8640500 :
10561 T
179500 T

475 +
620 +
744 +
861 +
2700 :
4 :
675 T
T

A  

620 +
800 +
1420 T

620 x <
205 =
800 x <
285 =
355100 :
1420 :
250 T
100 T

13000000 +
 13000000 :
 185000 :
 70 T
 5000 T

100 +
 70 × -
 30 T

Enter 8,640,500 and depress key $\frac{\text{D}}{\text{D}}$: the quotient printed is 105.61, showing a percentage increase of 5.61 %.

Example 4:

Profit percentages.

An article which cost 130,000 is sold for 185,000: find the percentage profit or the selling over the cost price.

Enter 130,000 00 and depress key $\frac{\text{D}}{\text{D}}$.

Enter 185,000 and depress key $\frac{\text{D}}{\text{D}}$.

Enter 100 and depress key $\frac{\text{D}}{\text{D}}$.

Depress in order keys M and --- .

Depress key $\frac{\text{D}}{\text{D}}$: the percentage profit required, 30 %, is printed.

Example 5:

Incidence percentages.

From 1,200 kg of raw material the following quantities have been obtained:

350 kg of product A
 200 kg of product B
 150 kg of product C
 500 kg of product D

1,200 kg

Find the percentage which each product represents of the original raw material.

In the normal way this calculation would be carried out in a series of divisions, using 1,200 as a constant divisor; but, for greater speed, the reciprocal of 1,200 can be worked out beforehand and used as a constant factor in a series of multiplications.

Enter 1,000,000 and depress key $\frac{\text{D}}{\text{D}}$.

Enter 1,200 and depress key $\frac{\text{D}}{\text{D}}$: the reciprocal of 1,200 is printed and automatically retained in the dynamic memory for uses as a constant factor.

Enter 350 and depress key $\frac{\text{D}}{\text{D}}$: the percentage of the total amount repre-

1000000 +
 1000000 :
 1200 :
 833 T
 400 T

350 =
 291550 T

sented by product A, 29.1550 %, is printed.

Enter 200 and depress key $\frac{\text{D}}{\text{D}}$: the second percentage, 16.6600 %, is printed.

Enter 150 and depress key $\frac{\text{D}}{\text{D}}$: the third percentage, 12.495 %, is printed.

Enter 500 and depress key $\frac{\text{D}}{\text{D}}$: the fourth percentage, 41.6500 %, is printed.

200 =
 166600 T

150 =
 124950 T

500 =
 416500 T

**Adding sterling amounts
 (British monetary system)**

The British monetary system consists of the following values:

- Pound sterling (symbol £), equal to 20 shillings;
- Shilling (symbol s. or /-), equal to 12 pence;
- Penny (symbol d.) subdivided into 2 halfpennies.

Thus the amount 2 pounds, 9 shillings, and 11 pence may be written as £2.9s.11d., or (more commonly) as £2.9.11d. or 49/11d., or (most commonly) as £2.9.11.

Sterling amounts cannot be added directly in the decimal system, or therefore on a decimal calculator such as the Divisumma 24; but they can be added if the pounds, shillings, and pence are added separately, and the total shillings and pence are then re-expressed as pounds shillings and pence.

+ 23.18. 6
 + 58. 8.10
 + 68.15. 2
 + 24. 6.11
 + 172.18. 9
 = 348. 8. 2

23018006 +
 58008010 +
 68015002 +
 24006011 +
 172018009 +
 345065038 T

Provided that (as in this example) neither the total sum of shillings nor

the total sum of pence is likely to exceed 999, allow the last six entry columns for the shillings and pence (three to each), entering and adding as follows:

23	018	006
58	008	010
68	015	002
24	006	011
172	018	009
345	065	038

At the end of the addition series, depress key **⌘**: the total is printed as 345065038, representing 345 pounds, 65 shillings, and 38 pence.

To convert the pence into shillings: Enter 38 (the number of pence) and depress key **⌈**.

Enter 12 (the number of pence in a shilling) and depress key **⌋**: the quotient printed, 3, represents the number of shillings, and the remainder, 2, the number of pence.

To convert the shillings into pounds: Depress in order keys **M** and **⌈**. Enter 65 (the number of shillings) and depress key **⌋**.

Enter 20 (the number of shillings in a pound) and depress key **⌋**: the quotient printed, 3, represents the number of pounds, and the remainder, 8, the number of shillings.

To obtain the pounds: Depress in order keys **M** and **⌈**. Enter 345 (the number of pounds already obtained) and depress key **⌋**. Depress key **⌘**: the number of pounds, 348, is printed.

The answer to the addition is, therefore, properly expressed in pounds, shillings and pence, £348.8.2.

Converting sterling currency to decimal currency (U. S. dollars)

Example:

Convert the following sterling amounts into U. S. dollars, given that £1.0.0 = \$2.80: £15.12.5, 239.10.0, and 47.9.11.

Enter 28 and depress key **X**.

Enter 1562083 (£15.12.5 expressed as pounds and decimals of a pound, read from the table on page 37) and depress key **=**: the dollar equivalent printed should be read as \$43.738324, or \$43.74.

Enter 23950000 and depress key **=**: the dollar equivalent printed should be read as \$670.60.

Enter 474583 and depress key **=**: the dollar equivalent printed should be read as \$132.89.

Converting decimal currency (U. S. dollars) into sterling currency

Example:

Convert \$86,325 into pounds, shillings, and pence, given that £1 = \$2.80.

Enter 86,325 00 000 (the extra zeros to provide sufficient decimal places for accuracy) and depress key **⌈**.

Enter 280 (the number of dollars to one pound) and depress key **⌋**: the quotient printed should be read as £30,830.357.

Enter 357 (the decimal place digits of the quotient just printed) and depress key **X**.

Enter 20 (the number of shillings in a pound) and depress key **=**:

38 +
38 :
12 :
3 T
2 T

3 × +
65 +
68 :
20 :
3 T
8 T

3 × +
345 +
348 T

T
28 × <
1562083 =
43738324 T
23950000 =
67060000 T
474583 =
13288324 T

8632500000 +
8632500000 :
280 :
30830357 T
40 T
357 × <
20 =
7140 T
140 × <
12 =
1680 T

the product printed should be read as 7.140s.

Enter 140 (the decimal place digits of the product just printed) and depress key \times .

Enter 12 and depress key \equiv : the product printed should be read as 1.68d.

The answer required is, therefore, to the nearest penny, £30,830.7.2d.

(The answer may also be obtained by reading off the decimal places of a pound obtained in the first division from the conversion table on page 38).

Sterling invoicing

Example:

Quantity	Unit price	Amount
25	3.15. 6	94. 7. 6
16	4. 9.11	71.18. 8
5	7. 3. 3	35.16. 3
Gross amount		202. 2. 5
Less 12 %		24. 5. 1
Net amount		177.17. 4

Disengage the automatic total printing lever, leaving the automatic subtotal lever disengaged as well.

Calculate the first extension of the invoice as follows:

Enter 3 (the number of pounds in the unit price) and depress key \times . Enter 240 (the number of pence in a pound) and depress key \equiv .

Enter 15 (the number of shillings in the unit price) and depress key \times .

Enter 12 (the number of pence in a shilling) and depress key \equiv .

Enter 6 (the number of pence in the unit price) and depress key $\frac{+}{D}$.

Depress in order keys IM and $\frac{*}{\times}$:

the unit price expressed in pence only, 906, is printed and transferred into the dynamic memory.

Enter 25 (the quantity) and depress key \equiv .

Enter 240 (again as the number of pence in a pound) and depress key \equiv : the machine prints in order the dividend 22,650 (the extended amount expressed in pence only), the divisor 240, and the quotient 94 (the number of pounds in the extended amount, as required).

Enter 12 (again as the number of pence in a shilling) and depress key \equiv : the machine prints in order the dividend, 90, the divisor, 12, and the quotient, 7, (the number of shillings in the extended amount, as required).

Depress key $\frac{*}{\times}$: the machine prints the remainder, 6, (the number of pence in the extended amount, as required).

The first extended amount is, therefore, £94.7.6.

Repeat the procedure to calculate the second and third extensions: $16 \times £4.9.11 = £71.18.8$, and $5 \times £7.3.3 = £35.16.3$.

Calculate the gross amount of the invoice as follows:

Enter and add the three extended amounts (as expressed in pence only): 22,650, 17,264, and 8,595.

Enter 240 and depress key \equiv : the machine prints in order the dividend, 48,509, (the gross amount expressed in pence only), the divisor, 240, and the quotient, 202, (the number of pounds in the gross amount, as required).

Enter 12 and depress key \equiv : the

4 \times <
240 =
9 \times <
12 =
11 +
1079 \times T

16 =
17264 :
240 :
71 T
224 :
12 :
18 T
8 T

7 \times <
240 =
3 \times <
12 =
3 +
1719 \times T

5 =
8595 :
240 :
35 T
195 :
12 :
16 T
3 T

A \bullet $\frac{+}{D}$

3 \times <
240 =
15 \times <
12 =
6 +
906 \times T

25 =
22650 :
240 :
94 T
90 :
12 :
7 T
6 T

22650 +
 17264 +
 8595 +
 48509 :
 240 :
 202 T
 29 :
 12 :
 2 T
 5 T

machine prints in order the dividend, 29, the divisor, 12, and the quotient, 2, (the number of shillings in the gross amount, as required).

Depress key \times : the machine prints the remainder, 5, (the number of pence in the gross amount, as required).

The gross amount of the invoice is, therefore, £202.2.5.

Calculate the discount and the net amount as follows:

Enter 48,509 (the gross amount of the invoice expressed in pence only) and depress key \times .

Enter 12 (the discount rate) and depress key $=$.

Enter 240 00 (two extra zeros to effect the necessary division by 100) and depress key \div : the machine prints in order the dividend, 582108, the divisor, 24000, and the quotient, 24, (the number of pounds in the discount, as required).

Enter 12 00 (again two extra zeros to effect the necessary division by 100) and depress key \div : the machine prints in order the dividend, 6108, the divisor, 1200, and the quotient, 5, (the number of shillings in the discount), as required.

Depress key \times : the remainder printed should be read as 1.08 (the number of pence in the discount, as required).

The amount of the discount is therefore, to the nearest penny, £34.5.1.

Repeat the procedure to calculate the net amount, using the factor 88 (the complement of 12 to 100) in place of the discount rate itself.

48509 \times <
 12 =
 582108 :
 24000 :
 24 T
 6108 :
 1200 :
 5 T
 108 T
 48509 \times <
 88 =
 4268792 :
 24000 :
 177 T
 20792 :
 1200 :
 17 T
 392 T

The net amount of the invoice is printed as £177.17.4 (to the nearest penny).

Square and cube roots

Used in conjunction with standard tables, the Divisumma 24 can provide quick square and cube roots of numbers larger than those given in the tables themselves.

Example 1:

Find the square root of 1,547.88 (correct to four decimal places).

Enter 154788 00 00 00 (i.e., 1,547.88 plus sufficient zeros to provide two decimal places for every one decimal place required in the answer) and depress key $\sqrt{\quad}$.

Enter the nearest approximation to the true square root given by the tables - i.e., 39.3446 = the square root of 1,548 - and depress key \div . As soon as the machine begins its division cycles, engage the repeat lever and hold it in the engaged position until the quotient and the remainder have been printed.

Depress key $\sqrt{\quad}$.

Depress in order keys M and $\sqrt{\quad}$.

Enter 2 and depress key \div .

The quotient obtained should be read as 39.3431, and represents a closer approximation to the square root required.

Re-enter 154788 00 00 00 and depress key $\sqrt{\quad}$.

Enter the quotient just obtained, 39.3431, and depress key \div .

Engage the repeat lever as before and hold it in the engaged position

154788000000 +
 154788000000 :
 393446 :
 393416 T
 48464 T

393446 +
 392416 \times +
 786862 :
 2 :
 302431 T
 T

154788000000 +
 154788000000 :
 393431 :
 393431 T
 48239 T

423734000000 +
 423734000000 :
 7513 :
 56400106 T
 3622 T

56400106 × +
 56400106 :
 7513 :
 7507 T
 15 T

7513 +
 7513 +
 7507 × +
 22533 :
 3 :
 7511 T
 T

423734000000 +
 423734000000 :
 7511 :
 56415124 T
 3636 T

56415124 × +
 56415124 :
 7511 :
 7511 T
 3 T

until the quotient and the remainder have been printed.

It will be noticed that the quotient printed, which should be read as 39.3431, is now equal to the divisor; this means that the amount may be taken as the required square root of 1,547.88, correct to four decimal places. If it had not been equal to the divisor, the procedure would have been continued until an equal quotient and divisor were found.

Example 2:

Find the cube root of 423,734 (correct to two decimal places).

Enter 423734 000 000 (i.e., 423,734 plus sufficient zeros to provide three decimal places for every one decimal place required in the answer) and depress key $\frac{+}{D}$.

Enter the nearest approximation to the true cube root given by the tables - i.e., 7.513 = the cube root of 424 - and depress key $\frac{+}{D}$.

After the quotient and remainder have been printed, depress in order keys M and $\frac{+}{D}$.

Re-enter 7513 and depress key $\frac{+}{D}$. As soon as the machine begins its division cycles, engage the repeat lever and hold it in the engaged position until the quotient and the remainder have been printed.

Depress key $\frac{+}{D}$ twice.

Depress in order keys M and $\frac{+}{D}$.

Enter 3 and depress key $\frac{+}{D}$.

The quotient obtained should be read as 75.11, and represents a closer approximation to the cube root required.

Re-enter 423734 000 000 and depress key $\frac{+}{D}$.

Enter the quotient just obtained, 75.11, and depress key $\frac{+}{D}$.

After the quotient and the remainder have been printed, depress in order keys M and $\frac{+}{D}$.

Re-enter 75.11 and depress key $\frac{+}{D}$. Engage the repeat lever as before and hold it in the engaged position until the quotient and the remainder have been printed.

It will be noticed that the quotient printed, which should be read as 75.11, is equal to the two divisors entered immediately before; this means that the amount may be taken as the required cube root of 423,734, correct to two decimal places.

NOTES:

1 - Often it will be found that the eventual quotient and divisor (or divisors), instead of being equal to each other, exhibit a small difference: of 1 in the case of square roots, and of 1 or 2 in the case of cube roots. In these cases it will usually be clear which of the amounts represents the true root; but, if in doubt, resolve the matter by squaring or cubing each of the amounts concerned and comparing the product with the original amount.

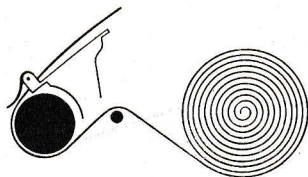
2 - The more accurate the first divisor entered, the shorter and quicker the operations required to find the correct square or cube root. For this reason it is always advisable to begin from standard tables. Nevertheless, if for any reason tables are not available, the method may still be applied, and a mental approximation to the required root employed as the first divisor.

Information for the operator

HOW TO FIT THE TALLY ROLL

Unwind the last few inches of the tally roll. Keeping this loose end underneath and unwinding it towards the front of machine, open out the two movable brackets at the back of the machine by slight finger pressure and fit the roll between them. As the finger pressure is released, the brackets will spring back and grip the roll firmly.

Feed the loose end over the metal bar and underneath the back of the platen. Then, by revolving the platen knob, wind the tally roll up, guide it under the metal column markers and over the paper table. Standard replacement tally rolls (width 3½") are available through the Olivetti organisation.



The rubber platen itself is designed to accommodate, besides tally rolls of the standard width, cards and sheets of paper up to 5½" wide. This allows calculations to be printed on pre-printed forms and lists.

PAPER TABLE

Situated immediately above the platen is a paper table designed to allow handwritten notes to be added to the calculation just carried out. It also prevents all chance of the tally roll curling back round the platen.

PAPER RELEASE LEVER

The paper release lever situated at the right-hand side of the paper table can be pushed down to free the grip of the feed rolls on the tally roll, and so to allow the roll to be adjusted for perfect alignment.

HOW TO CHANGE THE RIBBON

Raise the black upper part of the machine's outer casing by easing it up from the front and pushing it back as far as it will go, and lift the metal column marker frame back on to the paper table.

Move back each of the two arms holding the ribbon against the spools until they are at right-angles to the sides of the machine, and lift the ribbon out on its spools. Unwind the ribbon from one of the spools, and fit the end of the new ribbon to this empty spool.

Set the two spools carrying the new ribbon back on their spindles, taking care that the red half of the ribbon is underneath. Fit the ribbon round the two ribbon guides situated close to each of the spools, close the ribbon arms again, re-

place the metal column marker frame, and set the black upper part of the casing back in position. New ribbons for the Divisumma 24 are available through the Olivetti organisation.

ELECTRIC MOTOR

The electric motor is designed specifically for the Divisumma 24, and is built into the machine in such a way that it is fully protected from damage and dust while still being readily accessible.

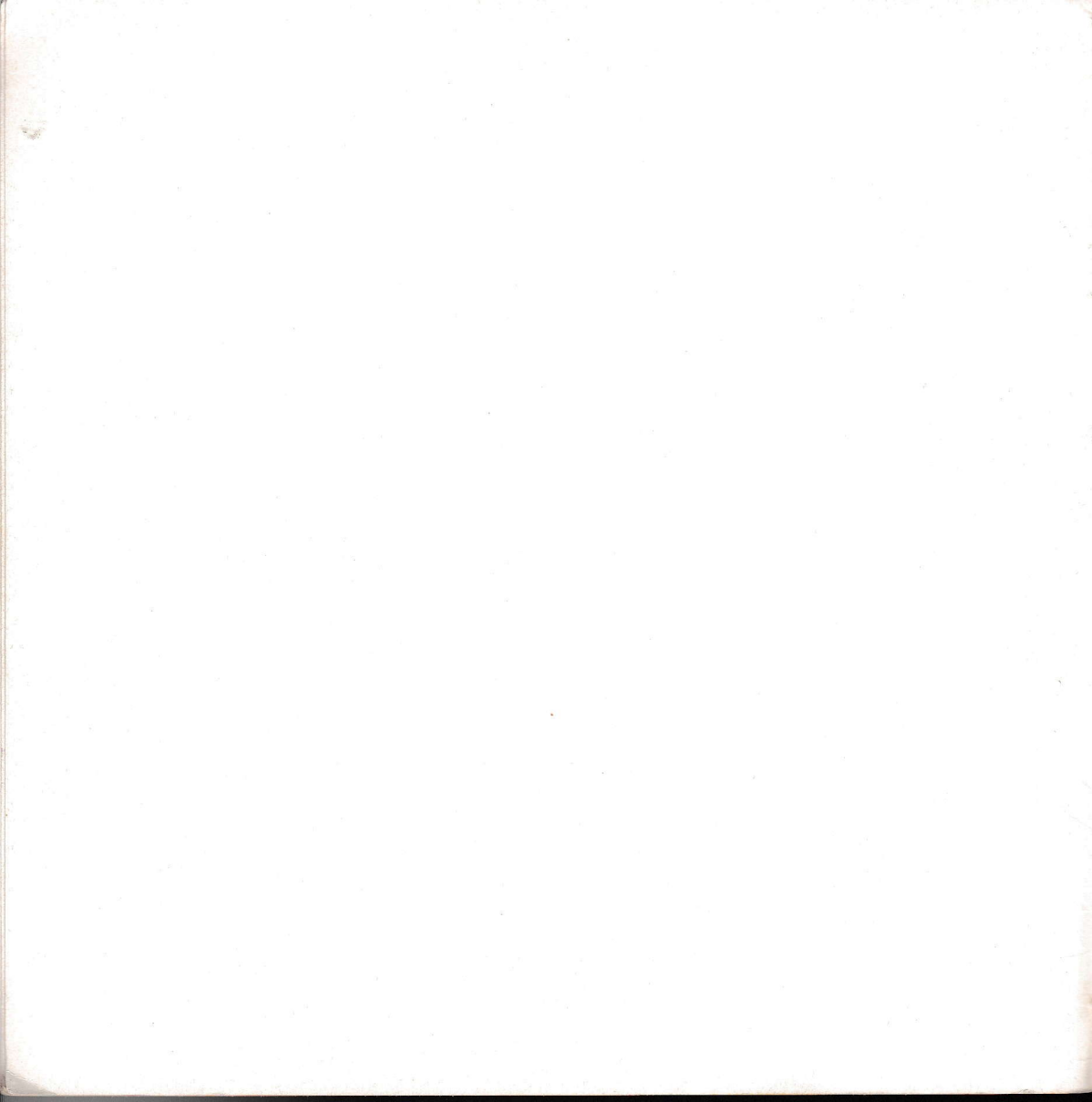
It is an induction motor, fitted with suppressors against radio and television interference. Its speed, which is related to the frequency of the power supply, is 250 cycles a minute on 230 volts. Under no circumstances should it be used on DC power supply, or on an AC power supply outside the range indicated on the plate attached to the outside of the motor. So that the best results and full efficiency can be obtained from any AC voltage, the

motor is fitted with a built-in voltage selector which can be adapted to any between 110 and 230 V.

TAKING CARE OF THE MACHINE

The Olivetti Divisumma 24 is a precision product built to give continuous and reliable service over a period of many years. Its strength of construction ensures a high degree of resistance to wear. Nevertheless the Divisumma 24, in common with all precision engineering products, must be protected from dust. For this reason it is supplied with a dust cover which should always be put over the machine when it is not in use.

Should the machine require mechanical attention at any time, even if only for lubrication, make sure that it is entrusted to a qualified person. The Olivetti organisation, through its Branches and Main Agents, maintains a force of trained specialist mechanics to provide all necessary mechanical attention.



Tables

For the convenience of the operator some of the tables most frequently used are given in the following pages:

reciprocals;

interest conversion factors (divisors and multipliers);

conversion factors;

decimal values of English currency;

days expressed as decimal equivalent of a year;

dozens and units expressed in decimals of one gross;

number of days between two dates;

decimal equivalents of common fractions.

Reciprocals of numbers from 1 to 1000

The following tables give only the decimal figures of the reciprocals.

Thus: the reciprocals of 300 is .0033333.

For numbers greater than 1,000, move the decimal point one place to the left for each additional decimal unit.

For example:

Reciprocal of 3,000 is .00033333.

Reciprocal of 30,000 is .000033333.

1 = 1	41 024390	81 012346	121 0082645	161 0062112
2 50000	42 023810	82 012195	122 0081967	162 0061728
3 33333	43 023256	83 012048	123 0081301	163 0061350
4 25000	44 022727	84 011905	124 0080645	164 0060976
5 20000	45 022222	85 011765	125 0080000	165 0060606
6 16667	46 021739	86 011628	126 0079365	166 0060241
7 14286	47 021277	87 011494	127 0078740	167 0059880
8 12500	48 020833	88 011364	128 0078125	168 0059524
9 11111	49 020408	89 011236	129 0077519	169 0059172
10 10000	50 020000	90 011111	130 0076923	170 0058823
11 090909	51 019608	91 010989	131 0076336	171 0058480
12 083333	52 019231	92 010870	132 0075758	172 0058140
13 076923	53 018868	93 010753	133 0075188	173 0057803
14 071429	54 018519	94 010638	134 0074627	174 0057471
15 066667	55 018182	95 010526	135 0074074	175 0057143
16 062500	56 017857	96 010417	136 0073529	176 0056818
17 058824	57 017544	97 010309	137 0072993	177 0056497
18 055556	58 017241	98 010204	138 0072464	178 0056180
19 052632	59 016949	99 010101	139 0071942	179 0055866
20 050000	60 016667	100 010000	140 0071429	180 0055556
21 047619	61 016393	101 0099010	141 0070922	181 0055249
22 045455	62 016129	102 0098039	142 0070423	182 0054945
23 043478	63 015873	103 0097087	143 0069930	183 0054645
24 041667	64 015625	104 0096154	144 0069444	184 0054348
25 040000	65 015385	105 0095238	145 0068966	185 0054054
26 038462	66 015152	106 0094340	146 0068493	186 0053763
27 037037	67 014925	107 0093458	147 0068027	187 0053476
28 035714	68 014706	108 0092593	148 0067568	188 0053191
29 034483	69 014493	109 0091743	149 0067114	189 0052910
30 033333	70 014286	110 0090909	150 0066667	190 0052632
31 032258	71 014085	111 0090090	151 0066225	191 0052356
32 031250	72 013889	112 0089286	152 0065789	192 0052083
33 030303	73 013699	113 0088496	153 0065359	193 0051813
34 029412	74 013514	114 0087719	154 0064935	194 0051546
35 028571	75 013333	115 0086957	155 0064516	195 0051282
36 027778	76 013158	116 0086207	156 0064103	196 0051020
37 027027	77 012987	117 0085470	157 0063694	197 0050761
38 026316	78 012821	118 0084746	158 0063291	198 0050505
39 025641	79 012658	119 0084034	159 0062893	199 0050251
40 025000	80 012500	120 0083333	160 0062500	200 0050000

201	0049751	241	0041494	281	0035587	321	0031153	361	0027701
202	0049505	242	0041322	282	0035461	322	0031056	362	0027624
203	0049261	243	0041152	283	0035336	323	0030960	363	0027548
204	0049020	244	0040984	284	0035211	324	0030864	364	0027473
205	0048780	245	0040816	285	0035088	325	0030769	365	0027397
206	0048544	246	0040650	286	0034965	326	0030675	366	0027322
207	0048309	247	0040486	287	0034843	327	0030581	367	0027248
208	0048077	248	0040323	288	0034722	328	0030488	368	0027174
209	0047847	249	0040161	289	0034602	329	0030395	369	0027100
210	0047619	250	0040000	290	0034483	330	0030303	370	0027027
211	0047393	251	0039841	291	0034364	331	0030211	371	0026954
212	0047170	252	0039683	292	0034247	332	0030120	372	0026882
213	0046948	253	0039526	293	0034130	333	0030030	373	0026810
214	0046729	254	0039370	294	0034014	334	0029940	374	0026738
215	0046512	255	0039216	295	0033898	335	0029851	375	0026667
216	0046296	256	0039063	296	0033784	336	0029762	376	0026596
217	0046083	257	0038911	297	0033670	337	0029674	377	0026525
218	0045872	258	0038760	298	0033557	338	0029586	378	0026455
219	0045662	259	0038610	299	0033445	339	0029499	379	0026385
220	0045455	260	0038462	300	0033333	340	0029412	380	0026316
221	0045249	261	0038314	301	0033223	341	0029325	381	0026247
222	0045045	262	0038168	302	0033113	342	0029240	382	0026178
223	0044843	263	0038023	303	0033003	343	0029155	383	0026110
224	0044643	264	0037879	304	0032895	344	0029070	384	0026042
225	0044444	265	0037736	305	0032787	345	0028986	385	0025974
226	0044248	266	0037594	306	0032680	346	0028902	386	0025907
227	0044053	267	0037453	307	0032573	347	0028818	387	0025840
228	0043860	268	0037313	308	0032468	348	0028736	388	0025773
229	0043668	269	0037175	309	0032362	349	0028653	389	0025707
230	0043478	270	0037037	310	0032258	350	0028571	390	0025641
231	0043290	271	0036900	311	0032154	351	0028490	391	0025575
232	0043103	272	0036765	312	0032051	352	0028409	392	0025510
233	0042918	273	0036630	313	0031949	353	0028329	393	0025445
234	0042735	274	0036496	314	0031847	354	0028249	394	0025381
235	0042553	275	0036364	315	0031746	355	0028169	395	0025316
236	0042373	276	0036232	316	0031646	356	0028090	396	0025253
237	0042194	277	0036101	317	0031546	357	0028011	397	0025189
238	0042017	278	0035971	318	0031447	358	0027933	398	0025126
239	0041841	279	0035842	319	0031348	359	0027855	399	0025063
240	0041667	280	0035714	320	0031250	360	0027778	400	0025000

401	0024938	441	0022676	481	0020790	521	0019194	561	0017825
402	0024876	442	0022624	482	0020747	522	0019157	562	0017794
403	0024814	443	0022573	483	0020704	523	0019120	563	0017762
404	0024752	444	0022523	484	0020661	524	0019084	564	0017731
405	0024691	445	0022472	485	0020619	525	0019048	565	0017699
406	0024631	446	0022422	486	0020576	526	0019011	566	0017668
407	0024570	447	0022371	487	0020534	527	0018975	567	0017637
408	0024510	448	0022321	488	0020492	528	0018939	568	0017606
409	0024450	449	0022272	489	0020450	529	0018904	569	0017575
410	0024390	450	0022222	490	0020408	530	0018868	570	0017544
411	0024331	451	0022173	491	0020367	531	0018832	571	0017513
412	0024272	452	0022124	492	0020325	532	0018797	572	0017483
413	0024213	453	0022075	493	0020284	533	0018762	573	0017452
414	0024155	454	0022026	494	0020243	534	0018727	574	0017422
415	0024096	455	0021978	495	0020202	535	0018692	575	0017391
416	0024038	456	0021930	496	0020161	536	0018657	576	0017361
417	0023981	457	0021882	497	0020121	537	0018622	577	0017331
418	0023923	458	0021834	498	0020080	538	0018587	578	0017301
419	0023866	459	0021786	499	0020040	539	0018553	579	0017271
420	0023810	460	0021739	500	0020000	540	0018519	580	0017241
421	0023753	461	0021692	501	0019960	541	0018484	581	0017212
422	0023697	462	0021645	502	0019920	542	0018450	582	0017182
423	0023641	463	0021598	503	0019881	543	0018419	583	0017153
424	0023585	464	0021552	504	0019841	544	0018382	584	0017123
425	0023529	465	0021505	505	0019802	545	0018349	585	0017094
426	0023474	466	0021459	506	0019763	546	0018315	586	0017065
427	0023419	467	0021413	507	0019724	547	0018282	587	0017036
428	0023364	468	0021368	508	0019685	548	0018248	588	0017007
429	0023310	469	0021322	509	0019646	549	0018215	589	0016978
430	0023256	470	0021277	510	0019608	550	0018182	590	0016949
431	0023202	471	0021231	511	0019569	551	0018149	591	0016920
432	0023148	472	0021186	512	0019531	552	0018116	592	0016892
433	0023095	473	0021142	513	0019493	553	0018083	593	0016863
434	0023041	474	0021097	514	0019455	554	0018051	594	0016835
435	0022989	475	0021053	515	0019417	555	0018018	595	0016807
436	0022936	476	0021008	516	0019380	556	0017986	596	0016779
437	0022883	477	0020964	517	0019342	557	0017953	597	0016750
438	0022831	478	0020921	518	0019305	558	0017921	598	0016722
439	0022779	479	0020877	519	0019268	559	0017889	599	0016694
440	0022727	480	0020833	520	0019231	560	0017857	600	0016667

601	0016639	641	0015601	681	0014684	721	0013870	761	0013141
602	0016611	642	0015576	682	0014663	722	0013850	762	0013123
603	0016584	643	0015552	683	0014641	723	0013831	763	0013106
604	0016556	644	0015528	684	0014620	724	0013812	764	0013089
605	0016529	645	0015504	685	0014599	725	0013793	765	0013072
606	0016502	646	0015480	686	0014577	726	0013774	766	0013055
607	0016474	647	0015456	687	0014556	727	0013755	767	0013038
608	0016447	648	0015432	688	0014535	728	0013736	768	0013021
609	0016420	649	0015408	689	0014514	729	0013717	769	0013004
610	0016393	650	0015385	690	0014493	730	0013699	770	0012987
611	0016367	651	0015361	691	0014472	731	0013680	771	0012970
612	0016340	652	0015337	692	0014451	732	0013661	772	0012953
613	0016313	653	0015314	693	0014430	733	0013643	773	0012937
614	0016287	654	0015291	694	0014409	734	0013624	774	0012920
615	0016260	655	0015267	695	0014388	735	0013605	775	0012903
616	0016234	656	0015244	696	0014368	736	0013587	776	0012887
617	0016207	657	0015221	697	0014347	737	0013569	777	0012870
618	0016181	658	0015198	698	0014327	738	0013550	778	0012853
619	0016155	659	0015175	699	0014306	739	0013532	779	0012837
620	0016129	660	0015152	700	0014286	740	0013514	780	0012821
621	0016103	661	0015129	701	0014265	741	0013495	781	0012804
622	0016077	662	0015106	702	0014245	742	0013477	782	0012788
623	0016051	663	0015083	703	0014225	743	0013459	783	0012771
624	0016026	664	0015060	704	0014205	744	0013441	784	0012755
625	0016000	665	0015038	705	0014184	745	0013423	785	0012739
626	0015974	666	0015015	706	0014164	746	0013405	786	0012723
627	0015949	667	0014993	707	0014144	747	0013387	787	0012706
628	0015924	668	0014970	708	0014124	748	0013369	788	0012690
629	0015898	669	0014948	709	0014104	749	0013351	789	0012674
630	0015873	670	0014925	710	0014085	750	0013333	790	0012658
631	0015848	671	0014903	711	0014065	751	0013316	791	0012642
632	0015823	672	0014881	712	0014045	752	0013298	792	0012626
633	0015798	673	0014859	713	0014025	753	0013280	793	0012610
634	0015773	674	0014837	714	0014006	754	0013263	794	0012594
635	0015748	675	0014815	715	0013986	755	0013245	795	0012579
636	0015723	676	0014793	716	0013966	756	0013228	796	0012563
637	0015699	677	0014771	717	0013947	757	0013210	797	0012547
638	0015674	678	0014749	718	0013928	758	0013193	798	0012531
639	0015649	679	0014728	719	0013908	759	0013175	799	0012516
640	0015625	680	0014706	720	0013889	760	0013158	800	0012500

801	0012484	841	0011891	881	0011351	921	0010858	961	0010406
802	0012469	842	0011876	882	0011338	922	0010846	962	0010395
803	0012453	843	0011862	883	0011325	923	0010834	963	0010384
804	0012438	844	0011848	884	0011312	924	0010823	964	0010373
805	0012422	845	0011834	885	0011299	925	0010811	965	0010363
806	0012407	846	0011820	886	0011287	926	0010799	966	0010352
807	0012392	847	0011806	887	0011274	927	0010787	967	0010341
808	0012376	848	0011792	888	0011261	928	0010776	968	0010331
809	0012361	849	0011779	889	0011249	929	0010764	969	0010320
810	0012346	850	0011765	890	0011236	930	0010753	970	0010309
811	0012330	851	0011751	891	0011223	931	0010741	971	0010299
812	0012315	852	0011737	892	0011211	932	0010730	972	0010288
813	0012300	853	0011723	893	0011198	933	0010718	973	0010277
814	0012285	854	0011710	894	0011186	934	0010707	974	0010267
815	0012270	855	0011696	895	0011173	935	0010695	975	0010256
816	0012255	856	0011682	896	0011161	936	0010684	976	0010246
817	0012240	857	0011669	897	0011148	937	0010672	977	0010235
818	0012225	858	0011655	898	0011136	938	0010661	978	0010225
819	0012210	859	0011641	899	0011123	939	0010650	979	0010215
820	0012195	860	0011628	900	0011111	940	0010638	980	0010204
821	0012180	861	0011614	901	0011099	941	0010627	981	0010194
822	0012165	862	0011601	902	0011086	942	0010616	982	0010183
823	0012151	863	0011587	903	0011074	943	0010604	983	0010173
824	0012136	864	0011574	904	0011062	944	0010593	984	0010163
825	0012121	865	0011561	905	0011050	945	0010582	985	0010152
826	0012107	866	0011547	906	0011038	946	0010571	986	0010142
827	0012092	867	0011534	907	0011025	947	0010560	987	0010132
828	0012077	868	0011521	908	0011013	948	0010549	988	0010121
829	0012063	869	0011507	909	0011001	949	0010537	989	0010111
830	0012048	870	0011494	910	0010989	950	0010526	990	0010101
831	0012034	871	0011481	911	0010977	951	0010515	991	0010091
832	0012019	872	0011468	912	0010965	952	0010504	992	0010081
833	0012005	873	0011455	913	0010953	953	0010493	993	0010070
834	0011990	874	0011442	914	0010941	954	0010482	994	0010060
835	0011976	875	0011429	915	0010929	955	0010471	995	0010050
836	0011962	876	0011416	916	0010917	956	0010460	996	0010040
837	0011947	877	0011403	917	0010905	957	0010449	997	0010030
838	0011933	878	0011390	918	0010893	958	0010438	998	0010020
839	0011919	879	0011377	919	0010881	959	0010428	999	0010010
840	0011905	880	0011364	920	0010870	960	0010417	1000	0010000

TABLE OF INTEREST FACTORS (360 DAY BASIS) - Interest from 1 to 10 %

%	DIVISORS				MULTIPLIERS			
	0	+ ¼ %	+ ½ %	+ ¾ %	0	+ ¼ %	+ ½ %	+ ¾ %
0	000,000.00	144,000.00	72,000.00	48,000.00	0.0000000000	0.0000069444	0.000013888	0.000020833
1	36,000.00	28,800.00	24,000.00	20,571.43	0.000027777	0.000034722	0.000041666	0.000048612
2	18,000.00	16,000.00	14,400.00	13,090.91	0.000055555	0.000062500	0.000069444	0.000076389
3	12,000.00	11,076.92	10,285.71	9,600.00	0.000083333	0.000090278	0.000097222	0.00010416
4	9,000.00	8,470.59	8,000.00	7,578.95	0.00011111	0.00011805	0.00012500	0.00013194
5	7,200.00	6,857.14	6,545.00	6,260.87	0.00013888	0.00014583	0.00015278	0.00015972
6	6,000.00	5,760.00	5,538.46	5,333.33	0.00016666	0.00017361	0.00018055	0.00018750
7	5,142.86	4,965.52	4,800.00	4,645.16	0.00019444	0.00020138	0.00020833	0.00021528
8	4,500.00	4,363.64	4,235.29	4,114.29	0.00022222	0.00022916	0.00023611	0.00024305
9	4,000.00	3,891.89	3,789.47	3,692.31	0.00025000	0.00025694	0.00026388	0.00027083
10	3,600.00	3,512.20	3,428.57	3,348.84	0.00027777	0.00028472	0.00029166	0.00029861

TABLE OF INTEREST FACTORS (365 DAY BASIS) - Interest from 1 to 10 %

%	DIVISORS				MULTIPLIERS			
	0	+ ¼ %	+ ½ %	+ ¾ %	0	+ ¼ %	+ ½ %	+ ¾ %
0	000,000.00	146,000.00	73,000.00	48,666.66	0.0000000000	0.0000068493	0.000013698	0.000020547
1	36,500.00	29,200.00	24,333.33	20,857.14	0.000027397	0.000034246	0.000041096	0.000047945
2	18,250.00	16,222.22	14,600.00	13,272.73	0.000054794	0.000061643	0.000068493	0.000075342
3	12,166.67	11,230.77	10,428.57	9,733.33	0.000082191	0.000089041	0.000095890	0.00010273
4	9,125.00	8,588.24	8,111.11	7,684.21	0.00010958	0.00011643	0.00012328	0.00013013
5	7,300.00	6,952.38	6,636.36	6,347.83	0.00013698	0.00014383	0.00015068	0.00015753
6	6,083.33	5,840.00	5,615.38	5,407.41	0.00016438	0.00017123	0.00017808	0.00018493
7	5,214.29	5,034.48	4,866.67	4,709.68	0.00019178	0.00019863	0.00020548	0.00021232
8	4,562.50	4,424.24	4,294.12	4,171.43	0.00021917	0.00022602	0.00023287	0.00023972
9	4,055.55	3,945.95	3,842.11	3,743.59	0.00024657	0.00025342	0.00026027	0.00026712
10	3,650.00	3,560.98	3,476.19	3,395.35	0.00027397	0.00028082	0.00028767	0.00029452

CONVERSION FACTORS

	Multiply	By	To obtain	Multiply	By	To obtain
Linear measures	Millimetres (mm.)	0.03937	Inches (in.)	Inches	25.40	Millimetres
	Centimetres (cm.)	0.3937	Inches	Feet	30.48	Centimetres
	Metres (m.)	3.281	Feet (ft.)	Feet	0.3048	Metres
	Metres (m.)	1.094	Yards (yd.)	Yards	0.9144	Metres
	Metres (m.)	0.5468	Fathoms	Fathoms (6 ft.)	1.829	Metres
	Kilometres (km.)	0.6214	Miles (land)	Cables (200 yd.)	182.9	Metres
	Kilometres (km.)	0.5396	Miles (sea)	Miles:		
				land (1,760 yd.)	1.609	Kilometres
				sea (2,027 yd.)	1.853	Kilometres
	Kilometres/hour	0.6214	Miles/hour	Miles/hour	1.609	Kilometres/hour
	Kilometres/hour	0.5396	Knots (sea miles/hour)	Miles/hour	0.8684	Knots
Square measures	Sq. millimetres	0.00155	Sq. inches	Sq. inches	645.2	Sq. millimetres
	Sq. centimetres	0.1550	Sq. inches	Sq. inches	6.452	Sq. centimetres
	Sq. metres	10.76	Sq. feet	Sq. feet	929.0	Sq. centimetres
	Sq. metres	1.196	Sq. yards	Sq. feet	0.09290	Sq. metres
	Sq. kilometres	247.1	Acres	Acres	0.8361	Sq. metres
	Sq. kilometres	0.3861	Sq. miles	Sq. yards	4.047	Sq. metres
	Hectares (ha.)	2.471	Acres	Acres	0.004047	Sq. kilometres
				Acres	0.4047	Hectares
				Sq. miles	2.590	Sq. kilometres
Cubic measures	Cu. centimetres (cc.)	0.06102	Cu. inches	Pints (Imp.)	0.5683	Litres
	Litres (lit.) 1,000 cc.	61.02	Cu. inches	Pints (US)	0.4732	Litres
	Litres (lit.) 1,000 cc.	0.03532	Cu. feet	Gallons (Imp.)	4.546	Litres
	Litres (lit.) 1,000 cc.	0.2642	Gallons (US)	Gallons (US)	3.785	Litres
	Litres (lit.) 1,000 cc.	0.2200	Gallons (Imp.)	Cu. feet	28.32	Litres
	Hectolitres (hl.)	26.42	Gallons (US)	Bushels (Imp.)	0.3637	Hectolitres
	Hectolitres (hl.)	22.00	Gallons (Imp.)	Bushels (US)	0.3524	Hectolitres
	Hectolitres (hl.)	2.838	Bushels (US)	Gallons (Imp.)	1.201	Gallons (US)
	Hectolitres (hl.)	2.750	Bushels (Imp.)	Gallons (US)	0.8327	Gallons (Imp.)
	Cu. metres (cu. m.)	35.31	Cu. feet	Barrels	34.47	Gallons (Imp.)
	Cu. metres (cu. m.)	264.2	Gallons (US)	Barrels	42	Gallons (US)
	Cu. metres (cu. m.)	220.0	Gallons (Imp.)	Barrels	0.1590	Cu. metres
	Cu. metres (cu. m.)	6.290	Barrels (bbl.)			
Weights	Grams (gm.)	0.03527	Ounces (oz.) *	Ounces *	28.35	Grams
	Grams (gm.)	0.03215	Ounces Troy	Ounces Troy	31.10	Grams
	Kilograms (kg.)	2.205	Pounds (lb.) *	Pounds *	453.6	Grams
	Metric quintals (q.)	220.5	Pounds (lb.) *	Pounds *	0.4536	Kilograms
	Metric tons	2.250	Pounds *	Hundredweights	0.05	Long tons
	Metric tons	1.102	Short tons	(cwt.) (112 lb.)	0.5080	Metric quintals
	Metric tons	0.9842	Long tons	Long tons	1.12	Short tons
				(2,240 lb.)	1.016	Metric tons
				Short tons	0.9829	Long tons
				(2,000 lb.)	0.9072	Metric tons
			* Avoirdupois			

CONVERSION TABLE OF SHILLINGS AND PENCE INTO DECIMALS OF A POUND

1 d. = £ 1/240 = £ 0.004166667

PENCE

Shs.	0	1	2	3	4	5	6	7	8	9	10	11
0	0.00000	0.00417	0.00833	0.01250	0.01667	0.02083	0.02500	0.02917	0.03333	0.03750	0.04167	0.04583
1	0.05000	0.05417	0.05833	0.06250	0.06667	0.07083	0.07500	0.07917	0.08333	0.08750	0.09167	0.09583
2	0.10000	0.10417	0.10833	0.11250	0.11667	0.12083	0.12500	0.12917	0.13333	0.13750	0.14167	0.14583
3	0.15000	0.15417	0.15833	0.16250	0.16667	0.17083	0.17500	0.17917	0.18333	0.18750	0.19167	0.19583
4	0.20000	0.20417	0.20833	0.21250	0.21667	0.22083	0.22500	0.22917	0.23333	0.23750	0.24167	0.24583
5	0.25000	0.25417	0.25833	0.26250	0.26667	0.27083	0.27500	0.27917	0.28333	0.28750	0.29167	0.29583
6	0.30000	0.30417	0.30833	0.31250	0.31667	0.32083	0.32500	0.32917	0.33333	0.33750	0.34167	0.34583
7	0.35000	0.35417	0.35833	0.36250	0.36667	0.37083	0.37500	0.37917	0.38333	0.38750	0.39167	0.39583
8	0.40000	0.40417	0.40833	0.41250	0.41667	0.42083	0.42500	0.42917	0.43333	0.43750	0.44167	0.44583
9	0.45000	0.45417	0.45833	0.46250	0.46667	0.47083	0.47500	0.47917	0.48333	0.48750	0.49167	0.49583
10	0.50000	0.50417	0.50833	0.51250	0.51667	0.52083	0.52500	0.52917	0.53333	0.53750	0.54167	0.54583
11	0.55000	0.55417	0.55833	0.56250	0.56667	0.57083	0.57500	0.57917	0.58333	0.58750	0.59167	0.59583
12	0.60000	0.60417	0.60833	0.61250	0.61667	0.62083	0.62500	0.62917	0.63333	0.63750	0.64167	0.64583
13	0.65000	0.65417	0.65833	0.66250	0.66667	0.67083	0.67500	0.67917	0.68333	0.68750	0.69167	0.69583
14	0.70000	0.70417	0.70833	0.71250	0.71667	0.72083	0.72500	0.72917	0.73333	0.73750	0.74167	0.74583
15	0.75000	0.75417	0.75833	0.76250	0.76667	0.77083	0.77500	0.77917	0.78333	0.78750	0.79167	0.79583
16	0.80000	0.80417	0.80833	0.81250	0.81667	0.82083	0.82500	0.82917	0.83333	0.83750	0.84167	0.84583
17	0.85000	0.85417	0.85833	0.86250	0.86667	0.87083	0.87500	0.87917	0.88333	0.88750	0.89167	0.89583
18	0.90000	0.90417	0.90833	0.91250	0.91667	0.92083	0.92500	0.92917	0.93333	0.93750	0.94167	0.94583
19	0.95000	0.95417	0.95833	0.96250	0.96667	0.97083	0.97500	0.97917	0.98333	0.98750	0.99167	0.99583

CONVERSION TABLE OF DECIMALS OF A POUND INTO SHILLINGS AND PENCE

£ 1 = 20 s. = 240 d.

(First and second decimal figures of a pound)

SECOND DECIMAL FIGURE

£	0		1		2		3		4	
	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.
0.0	0	0	0	2.4	0	4.8	0	7.2	0	9.6
0.1	2	0	2	2.4	2	4.8	2	7.2	2	9.6
0.2	4	0	4	2.4	4	4.8	4	7.2	4	9.6
0.3	6	0	6	2.4	6	4.8	6	7.2	6	9.6
0.4	8	0	8	2.4	8	4.8	8	7.2	8	9.6
0.5	10	0	10	2.4	10	4.8	10	7.2	10	9.6
0.6	12	0	12	2.4	12	4.8	12	7.2	12	9.6
0.7	14	0	14	2.4	14	4.8	14	7.2	14	9.6
0.8	16	0	16	2.4	16	4.8	16	7.2	16	9.6
0.9	18	0	18	2.4	18	4.8	18	7.2	18	9.6

£	5		6		7		8		9	
	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.
0.0	1	0	1	2.4	1	4.8	1	7.2	1	9.6
0.1	3	0	3	2.4	3	4.8	3	7.2	3	9.6
0.2	5	0	5	2.4	5	4.8	5	7.2	5	9.6
0.3	7	0	7	2.4	7	4.8	7	7.2	7	9.6
0.4	9	0	9	2.4	9	4.8	9	7.2	9	9.6
0.5	11	0	11	2.4	11	4.8	11	7.2	11	9.6
0.6	13	0	13	2.4	13	4.8	13	7.2	13	9.6
0.7	15	0	15	2.4	15	4.8	15	7.2	15	9.6
0.8	17	0	17	2.4	17	4.8	17	7.2	17	9.6
0.9	19	0	19	2.4	19	4.8	19	7.2	19	9.6

CONVERSION TABLE OF DECIMALS OF A POUND INTO SHILLINGS AND PENCE

(Third and fourth decimal figures of a pound)

FOURTH DECIMAL FIGURE

£	0		1		2		3		4	
	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.
0.000	0	0.000	0	0.024	0	0.048	0	0.072	0	0.096
0.001	0	0.240	0	0.264	0	0.288	0	0.312	0	0.336
0.002	0	0.480	0	0.504	0	0.528	0	0.552	0	0.576
0.003	0	0.720	0	0.744	0	0.768	0	0.792	0	0.816
0.004	0	0.960	0	0.984	0	1.008	0	1.032	0	1.056
0.005	0	1.200	0	1.224	0	1.248	0	1.272	0	1.296
0.006	0	1.440	0	1.464	0	1.488	0	1.512	0	1.536
0.007	0	1.680	0	1.704	0	1.728	0	1.752	0	1.776
0.008	0	1.920	0	1.944	0	1.968	0	1.992	0	2.016
0.009	0	2.160	0	2.184	0	2.208	0	2.232	0	2.256

£	5		6		7		8		9	
	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.
0.000	0	0.120	0	0.144	0	0.168	0	0.192	0	0.216
0.001	0	0.360	0	0.384	0	0.408	0	0.432	0	0.456
0.002	0	0.600	0	0.624	0	0.648	0	0.672	0	0.696
0.003	0	0.840	0	0.864	0	0.888	0	0.912	0	0.936
0.004	0	1.080	0	1.104	0	1.128	0	1.152	0	1.176
0.005	0	1.320	0	1.344	0	1.368	0	1.392	0	1.416
0.006	0	1.560	0	1.584	0	1.608	0	1.632	0	1.656
0.007	0	1.800	0	1.824	0	1.848	0	1.872	0	1.896
0.008	0	2.040	0	2.064	0	2.088	0	2.112	0	2.136
0.009	0	2.280	0	2.304	0	2.328	0	2.352	0	2.376

TABLE OF DAYS EXPRESSED AS THE DECIMAL EQUIVALENT OF THE YEAR

(365 days)

January		February		March		April		May		June	
1	.00274	32	.08767	60	.16438	91	.24932	121	.33151	152	.41644
2	.00548	33	.09041	61	.16712	92	.25205	122	.33425	153	.41918
3	.00822	34	.09315	62	.16986	93	.25479	123	.33699	154	.42192
4	.01096	35	.09589	63	.17260	94	.25753	124	.33973	155	.42466
5	.01370	36	.09863	64	.17534	95	.26027	125	.34247	156	.42740
6	.01644	37	.10137	65	.17808	96	.26301	126	.34521	157	.43014
7	.01918	38	.10411	66	.18082	97	.26575	127	.34795	158	.43288
8	.02192	39	.10685	67	.18356	98	.26849	128	.35068	159	.43562
9	.02466	40	.10959	68	.18630	99	.27123	129	.35342	160	.43836
10	.02740	41	.11233	69	.18904	100	.27397	130	.35616	161	.44110
11	.03014	42	.11507	70	.19178	101	.27671	131	.35890	162	.44384
12	.03288	43	.11781	71	.19452	102	.27945	132	.36164	163	.44658
13	.03562	44	.12055	72	.19726	103	.28219	133	.36438	164	.44932
14	.03836	45	.12329	73	.20000	104	.28493	134	.36712	165	.45206
15	.04110	46	.12603	74	.20274	105	.28767	135	.36986	166	.45479
16	.04384	47	.12877	75	.20548	106	.29041	136	.37260	167	.45753
17	.04658	48	.13151	76	.20822	107	.29315	137	.37534	168	.46027
18	.04932	49	.13425	77	.21096	108	.29589	138	.37808	169	.46301
19	.05206	50	.13699	78	.21370	109	.29863	139	.38082	170	.46575
20	.05479	51	.13973	79	.21644	110	.30137	140	.38356	171	.46849
21	.05753	52	.14247	80	.21918	111	.30411	141	.38630	172	.47123
22	.06027	53	.14521	81	.22192	112	.30685	142	.38904	173	.47397
23	.06301	54	.14795	82	.22466	113	.30959	143	.39178	174	.47671
24	.06575	55	.15068	83	.22740	114	.31233	144	.39452	175	.47945
25	.06849	56	.15342	84	.23014	115	.31507	145	.39726	176	.48219
26	.07123	57	.15616	85	.23288	116	.31781	146	.40000	177	.48493
27	.07397	58	.15890	86	.23562	117	.32055	147	.40274	178	.48767
28	.07671	59	.16164	87	.23836	118	.32329	148	.40548	179	.49041
29	.07945	60	.16438	88	.24110	119	.32603	149	.40822	180	.49315
30	.08219			89	.24384	120	.32877	150	.41096	181	.49589
31	.08493			90	.24658			151	.41370		

TABLE OF DAYS EXPRESSED AS THE DECIMAL EQUIVALENT OF THE YEAR
(365 days)

July		August		September		October		November		December		
182	.49863	213	.58356	244	.66849	274	.75068	305	.83562	335	.91781	1
183	.50137	214	.58630	245	.67123	275	.75342	306	.83836	336	.92055	2
184	.50411	215	.58904	246	.67397	276	.75616	307	.84110	337	.92329	3
185	.50685	216	.59178	247	.67671	277	.75890	308	.84384	338	.92603	4
186	.50959	217	.59452	248	.67945	278	.76164	309	.84658	339	.92877	5
187	.51233	218	.59726	249	.68219	279	.76438	310	.84932	340	.93151	6
188	.51507	219	.60000	250	.68493	280	.76712	311	.85205	341	.93425	7
189	.51781	220	.60274	251	.68767	281	.76986	312	.85479	342	.93699	8
190	.52055	221	.60548	252	.69041	282	.77260	313	.85753	343	.93973	9
191	.52329	222	.60822	253	.69315	283	.77534	314	.86027	344	.94247	10
192	.52603	223	.61096	254	.69589	284	.77808	315	.86301	345	.94521	11
193	.52877	224	.61370	255	.69863	285	.78082	316	.86575	346	.94795	12
194	.53151	225	.61644	256	.70137	286	.78356	317	.86849	347	.95068	13
195	.53425	226	.61918	257	.70411	287	.78630	318	.87123	348	.95342	14
196	.53699	227	.62192	258	.70685	288	.78904	319	.87397	349	.95616	15
197	.53973	228	.62466	259	.70959	289	.79178	320	.87671	350	.95890	16
198	.54247	229	.62740	260	.71233	290	.79452	321	.87945	351	.96164	17
199	.54521	230	.63014	261	.71507	291	.79726	322	.88219	352	.96438	18
200	.54795	231	.63288	262	.71781	292	.80000	323	.88493	353	.96712	19
201	.55068	232	.63562	263	.72055	293	.80274	324	.88767	354	.96986	20
202	.55342	233	.63836	264	.72329	294	.80548	325	.89041	355	.97260	21
203	.55616	234	.64110	265	.72603	295	.80822	326	.89315	356	.97534	22
204	.55890	235	.64384	266	.72877	296	.81096	327	.89589	357	.97808	23
205	.56164	236	.64658	267	.73151	297	.81370	328	.89863	358	.98082	24
206	.56438	237	.64932	268	.73425	298	.81644	329	.90137	359	.98356	25
207	.56712	238	.65205	269	.73699	299	.81918	330	.90411	360	.98630	26
208	.56986	239	.65479	270	.73973	300	.82192	331	.90685	361	.98904	27
209	.57260	240	.65753	271	.74247	301	.82466	332	.90959	362	.99178	28
210	.57534	241	.66027	272	.74521	302	.82740	333	.91233	363	.99452	29
211	.57808	242	.66301	273	.74795	303	.83014	334	.91507	364	.99726	30
212	.58082	243	.66575			304	.83288			365	1.00000	31

TABLE FOR THE CONVERSION OF DOZENS AND UNITS INTO DECIMALS OF 1 GROSS

1 gross = 12 dozen = 144 units

Doz.	Units	Gross	Doz.	Units	Gross	Doz.	Units	Gross	Doz.	Units	Gross
—	1	.00694	1	37	.25694	1	73	.50694	1	109	.75694
—	2	.01389	2	38	.26389	2	74	.51389	2	110	.76389
—	3	.02083	3	39	.27083	3	75	.52083	3	111	.77083
—	4	.02778	4	40	.27778	4	76	.52778	4	112	.77778
—	5	.03472	5	41	.28472	5	77	.53472	5	113	.78472
—	6	.04167	6	42	.29167	6	78	.54167	6	114	.79167
—	7	.04861	7	43	.29861	7	79	.54861	7	115	.79861
—	8	.05556	8	44	.30556	8	80	.55556	8	116	.80556
—	9	.06250	9	45	.31250	9	81	.56250	9	117	.81250
—	10	.06944	10	46	.31944	10	82	.56944	10	118	.81944
—	11	.07639	11	47	.32639	11	83	.57639	11	119	.82639
[1]	12	.08333	[4]	48	.33333	[7]	84	.58333	[10]	120	.83333
1	13	.09028	1	49	.34028	1	85	.59028	1	121	.84028
2	14	.09722	2	50	.34722	2	86	.59722	2	122	.84722
3	15	.10417	3	51	.35417	3	87	.60417	3	123	.85417
4	16	.11111	4	52	.36111	4	88	.61111	4	124	.86111
5	17	.11806	5	53	.36806	5	89	.61806	5	125	.86806
6	18	.12500	6	54	.37500	6	90	.62500	6	126	.87500
7	19	.13194	7	55	.38194	7	91	.63194	7	127	.88194
8	20	.13889	8	56	.38889	8	92	.63889	8	128	.88889
9	21	.14583	9	57	.39583	9	93	.64583	9	129	.89583
10	22	.15278	10	58	.40278	10	94	.65278	10	130	.90278
11	23	.15972	11	59	.40972	11	95	.65972	11	131	.90972
[2]	24	.16667	[5]	60	.41667	[8]	96	.66667	[11]	132	.91667
1	25	.17361	1	61	.42361	1	97	.67361	1	133	.92361
2	26	.18056	2	62	.43056	2	98	.68056	2	134	.93056
3	27	.18750	3	63	.43750	3	99	.68750	3	135	.93750
4	28	.19444	4	64	.44444	4	100	.69444	4	136	.94444
5	29	.20139	5	65	.45139	5	101	.70139	5	137	.95139
6	30	.20833	6	66	.45833	6	102	.70833	6	138	.95833
7	31	.21528	7	67	.46528	7	103	.71528	7	139	.96528
8	32	.22222	8	68	.47222	8	104	.72222	8	140	.97222
9	33	.22917	9	69	.47917	9	105	.72917	9	141	.97917
10	34	.23611	10	70	.48611	10	106	.73611	10	142	.98611
11	35	.24306	11	71	.49306	11	107	.74306	11	143	.99306
[3]	36	.25000	[6]	72	.50000	[9]	108	.75000	[12]	144	1.00000

TABLE FOR NUMBER OF DAYS BETWEEN TWO DATES

Example of use: To find what percentage of 3 years is the number of days between 24th April, 1964 and 19th November, 1964 read the figures opposite April (4) and below November (11). This is 214 and that is the number of days between any given date in April and the same date in November. From the 19th to the 24th is 5 days, and as the second date is the earlier in the month subtract 5 from 214. This gives 209 days expired. If the last day of February in a leap-year is included, add one to the result. Below the table we find that one day is 0.000913 of three years. Enter .0913 on keyboard and multiply by 209.

From	A	(1) Jan.	(2) Feb.	(3) Mar.	(4) April	(5) May	(6) June	(7) July	(8) Aug.	(9) Sept.	(10) Oct.	(11) Nov.	(12) Dec.
(1) January	365	31	59	90	120	151	181	212	243	273	304	334	
(2) February	334	365	28	59	89	120	150	181	212	242	273	303	
(3) March	306	337	365	31	61	92	122	153	184	214	245	275	
(4) April	275	306	334	365	30	61	91	122	153	183	214	244	
(5) May	245	276	304	335	365	31	61	92	123	153	184	214	
(6) June	214	245	273	304	334	365	30	61	92	122	153	183	
(7) July	184	215	243	274	304	335	365	31	62	92	123	153	
(8) August	153	184	212	243	273	304	334	365	31	61	92	122	
(9) September	122	153	181	212	242	273	303	334	365	30	61	91	
(10) October	92	123	151	182	212	243	273	304	335	365	31	61	
(11) November	61	92	120	151	181	212	242	273	304	334	365	30	
(12) December	31	62	90	121	151	182	212	243	274	304	335	365	

Decimal Equivalent of One Day in

- 1 Year - .002740
- 2 Years - .001370
- 3 Years - .000913
- 4 Years - .000685
- 5 Years - .000584

TABLE OF DECIMAL EQUIVALENTS OF COMMON FRACTIONS

	1/3	1/4	1/5	1/6	1/7	1/8	1/9	1/11	1/12	1/13
1	.3333	.25	.2	.1667	.1429	.125	.1111	.0909	.0833	.0769
2	.6667	.5	.4	.3333	.2857	.25	.2222	.1818	.1667	.1538
3		.75	.6	.5	.4286	.375	.3333	.2727	.25	.2308
4			.8	.6667	.5714	.5	.4444	.3636	.3333	.3077
5				.8333	.7143	.625	.5556	.4545	.4167	.3846
6					.8571	.75	.6667	.5455	.5	.4615
7						.875	.7778	.6364	.5833	.5385
8							.8889	.7273	.6667	.6154
9								.8182	.75	.6923
10								.9091	.8333	.7692
11									.9167	.8462
12										.9231

	1/14	1/15	1/16	1/17	1/18	1/19	1/20	1/21	1/22	1/23	1/24
1	.0714	.0667	.0625	.0588	.0555	.0526	.05	.0476	.0454	.0435	.0417
2	.1429	.1333	.125	.1176	.1111	.1053	.10	.0952	.0909	.0869	.0833
3	.2143	.2	.1875	.1765	.1666	.1579	.15	.1428	.1363	.1304	.1250
4	.2857	.2667	.25	.2353	.2222	.2105	.20	.1905	.1818	.1739	.1666
5	.3571	.3333	.3125	.2941	.2777	.2631	.25	.2381	.2273	.2174	.2083
6	.4286	.4	.375	.3529	.3333	.3157	.30	.2857	.2727	.2608	.25
7	.5	.4667	.4375	.4117	.3889	.3684	.35	.3333	.3182	.3043	.2916
8	.5714	.5333	.5	.4706	.4444	.4210	.40	.3809	.3636	.3478	.3333
9	.6429	.6	.5625	.5294	.50	.4737	.45	.4286	.4091	.3913	.3750
10	.7143	.6667	.625	.5882	.5555	.5263	.50	.4762	.4545	.4348	.4166
11	.7857	.7333	.6875	.6470	.6111	.5789	.55	.5238	.50	.4782	.4583
12	.8571	.8	.75	.7059	.6666	.6316	.60	.5714	.5454	.5217	.50
13	.9286	.8667	.8125	.7647	.7222	.6842	.65	.6190	.5909	.5652	.5416
14		.9333	.875	.8235	.7777	.7368	.70	.6666	.6363	.6087	.5833
15			.9375	.8823	.8333	.7894	.75	.7143	.6818	.6522	.6250
16				.9412	.8888	.8421	.80	.7619	.7273	.6956	.6666
17					.9444	.8947	.85	.8095	.7727	.7391	.7083
18						.9473	.90	.8571	.8181	.7826	.7500
19							.95	.9047	.8636	.8261	.7916
20								.9524	.9091	.8695	.8333
21									.9545	.9130	.8750
22										.9565	.9166
23											.9583





olivetti

Divisumma 24