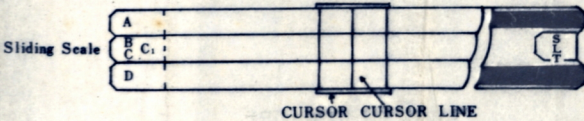


HOW TO USE THE SANKYO SLIDE RULE



Structure and components



The slide rule can be described as a ruler having logarithmic graduations. The scales A and B are identically graduated from 1 to 100, and the scales C and D from 1 to 10.

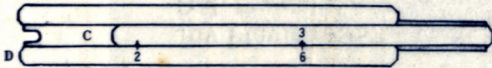
Calculating with the slide rule

- Read the scales up to 3 figures.
- All calculations are to be made in units place.
- In principle, answers are to be obtained on the scales A and B.

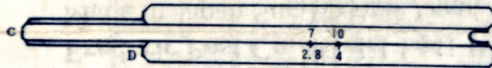
1) Basic multiplication and division:

For basic multiplication and division, the scales C and D are used.

Example 1 $2 \times 3 = 6$ Example 2 $6 \div 3 = 2$



Example 3 $4 \times 7 = 28$ Example 4 $2.8 \div 7 = 0.4$

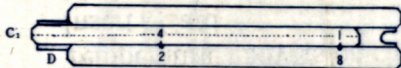


For example 3, the answer divided by 10 will be shown on the scale D; while for example 4, the answer multiplied by 10 will be shown on the scale D.

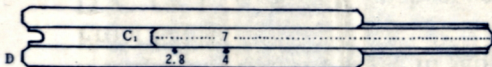
2) How to use the scale C₁:

The scale C₁ is graduated with numbers arranged opposite to the numbers on the scale C. Now, the scales C₁ and D will be used for calculation.

Example 5 $2 \times 4 = 8$ Example 6 $8 \div 4 = 2$



Example 7 $4 \times 7 = 28$ Example 8 $2.8 \div 7 = 0.4$

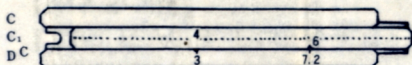


These examples show just the opposite way of multiplying and dividing as compared with the preceding examples where the scales C and D were used.

3) Continual multiplication and division:

The scales C, C₁ and D will be used.

Example 9 $3 \times 4 \times 6 = 72$ Example 10 $\frac{7.2}{6 \times 4} = 0.3$



4) Proportion:

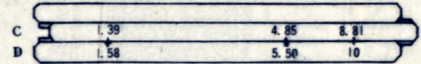
The scales C and D will be used, setting one against the other.

Example 11—Fill the blanks below with percentages and index numbers.

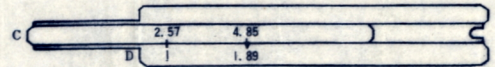
Amount	%	Index number
257	(29.2)	100
139	(15.8)	* (54.1)
485	(55.0)	(189)
Total 881	100	

* out of the scale

Percentages



Index numbers.



5) Inverse proportion:

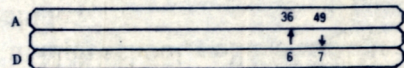
The scales C₁ and D will be used, setting one against the other. Example omitted.

6) Square and root:

For calculation of square or root of numbers, the scales A and D will be used.

Example 12 $6^2 = 36$

Example 13 $\sqrt{49} = 7$

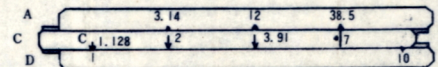


7) Diameter and area of circles:

When the π on the scale A is set to 4 on the scale B, there is a point marked C where 1 on the scale D is in line with 1,128 on the scale C. With the slide scale in this position, the Cursor line gives the diameter of a circle on the scale C and its area on the scale A.

Example 15—Fill the blanks below.

diameter	area
2 cm	(3.14 cm ²)
(3.91 cm)	12 cm ²
7 cm	(38.5 cm ²)



Note:

For numbers out of the scales, set the mark C to 10 on the scale D.

SANKYO SLIDE RULE CO., LTD.

Tokyo, Japan.