Trachtenberg System Notes

Simple Method of Division (Cutler and McShane translation of Trachtenberg, page 135) [1]

$$\begin{split} A &= \sum_{k=0}^{N} 10^k a_k \\ B &= \beta A = \beta \sum_{k=0}^{N} 10^k a_k = \sum_{k=0}^{N} 10^k \beta a_k = \sum_{k=0}^{N} 10^k b_k \\ &\to \beta \sum_{k=0}^{N} a_k = \sum_{k=0}^{N} b_k \end{split}$$

References

[1] R. M. J. Trachtenberg, translated by A. Cutler, *The Trachtenberg Speed System of Basic Mathematics*. Doubleday and Company, Inc., 1960.