

Infinite Division

This routine performs infinite division by pausing to display successive single digits of the quotient y/x . First pause = Int. (y/x). The routine is accurate provided each of x and y consists of 9 or less digits and $y \geq 10x$. By writing down the sequence of digits one may be able to recognize the repeating pattern of digits in the decimal expansion of the rational number y/x .

To run program, key in dividend y , press ENTER, key in divisor x , press fA.

Example $\frac{80 \text{ Dividend}}{81 \text{ Divisor}} = 0.987654320987654\ldots$

083	g LBL A	31 25 11
084	DSP 0	23 00
085	STO 6	33 06
086	X \leftrightarrow Y	35 52
087	f LBL 3	31 25 03
088	STO 7	33 07
089	RCL 6	34 06
090	STO 7	33 81 07
091	RCL 7	34 07
092	f INT	31 83
093	h PSE	35 72
094	x	71
095	-	51
096	1	01
097	0	00
098	x	71
099	GTO 3	22 03