

Overseas Training (SOLUTION)



This puzzle gives a number of sentences that need to be deciphered. Eventually, solvers should piece together that these sentences represent equations in base 11, according to the following translation:

nil	0	-ry	times 11
me	1	-t	times 121
nu	2	-sh	times 1331
zo	3		
bi	4	lef	add
sa	5	gul	subtract
we	6	sop	multiply
cu	7	bim	divide
po	8	zav	equals
hi	9		
la	10 (or A)	un-	negative

Numbers are written using 1s digit first, then 11s, then 121s, then 1331s. For example, the number 1234_{11} would translate to “bizorynutmesh”.

Math is done using Reverse Polish (postfix) notation, so $1\ 2\ 3\ +\ \times$ translates to $1 \times (2 + 3)$.

Finally, do the last calculation to get the answer: **SALARY CUT**.

DETAILED TRANSLATIONS

Note: In the following, a number written as a subscript is written in base 11. "A" represents the digit 10.

ADDITION

Me me lef zav nu.	$1 + 1 = 2$
Me nu lef zav zo.	$1 + 2 = 3$
Nu zo lef zav sa.	$2 + 3 = 5$
Zo sa lef zav po.	$3 + 5 = 8$
Sa po lef zav numery.	$5 + 8 = 12_{11}$
Po numery lef zav lamery.	$8 + 12_{11} = 1A_{11}$

MULTIPLICATION (SQUARES)

Nu nu sop zav bi.	$2 \times 2 = 4$
Zo zo sop zav hi.	$3 \times 3 = 9$
Bi bi sop zav samery.	$4 \times 4 = 15_{11}$
Sa sa sop zav zonury.	$5 \times 5 = 23_{11}$

SUBTRACTION AND NEGATIVES

We we gul zav nil.	$6 - 6 = 0$
Po we gul zav nu.	$8 - 6 = 2$
Nu we gul zav unbi.	$2 - 6 = -4$
Unbi we gul zav unla.	$-4 - 6 = -A_{11}$
Unla we gul zav unsamery.	$-A_{11} - 6 = -15_{11}$

DIVISION

We zo bim zav nu.	$6 \div 3 = 2$
Nupory sa bim zav cumery.	$82_{11} \div 5 = 17_{11}$
Zomet bi bim zav hinury.	$103_{11} \div 4 = 29_{11}$
Bicuryzot memery bim zav bizory.	$374_{11} \div 11_{11} = 34_{11}$
Cunurymesh pocyry bim zav samery.	$1027_{11} \div 78_{11} = 15_{11}$

ORDER OF OPERATIONS

Me nu lef zo lef zav we.	$(1 + 2) + 3 = 6$
Me nu zo lef lef zav we.	$1 + (2 + 3) = 6$
Me nu zo sop sop zav we.	$1 \times (2 \times 3) = 6$
Me nu zo sop lef zav cu.	$1 + (2 \times 3) = 7$
Me nu zo sop gul zav unsa.	$1 - (2 \times 3) = -1$
Me nu zo gul sop zav unme.	$1 \times (2 - 3) = -5$
Sa po gul unzo gul zav nil.	$(5 - 8) - (-3) = 0$

La himery bim pobiry sop zav binury.

$$(A_{11} \div 19_{11}) \times 48_{11} = 24_{11}$$

Hi pomery lef la sop zory gul zav sanut.

$$(9 + 18_{11}) \times A_{11} - 30_{11} = 205_{11}$$

Lapory cu sop sa pocyrymet sop lef zav nuryzotmesh.

$$(8A_{11} \times 7) + (5 \times 178_{11}) = 1320_{11}$$

Unhibiry unla sop cumery gul zomerynut bim zav nu.

$$((-49_{11} \times -A_{11}) - 17_{11}) \div 213_{11} = 2$$

Mesh la webiry sop nu bim gul wemery bi mery gul sop lef zav

$$\begin{aligned} & (1000_{11} - ((A_{11} \times 46_{11}) \div 2)) + (16_{11} \times (4 - 10_{11})) \\ & = 7A5_{11} \end{aligned}$$