

CONVERT TO FILL IN THE BOXES FOR THE SENTENCE BELOW

Item	Convert From	Convert To
(1)	20_{four}	base 3
(2)	1111_{three}	base 10
(3)	123_{five}	base 10
(4)	200_{three}	base 5
(5)	3_{five}	base 3
(6)	2102_{three}	base 10
(7)	312_{ten}	base 5
(8)	20122_{three}	base 5
(9)	324_{five}	base 10
(10)	2212_{three}	base 10
(11)	121_{five}	base 3
(12)	100100_{two}	base 5

Table 1

Answers	Letter
38_{ten}	S
40_{ten}	A
65_{ten}	N
10_{three}	R
121_{five}	L
33_{five}	E
89_{ten}	J
22_{three}	B
2222_{five}	O
1204_{five}	T
77_{ten}	U
1100_{three}	F

Table 2

Instructions: The goal is to try to determine what intriguing sentence appears below converting as few numbers in Table 1 as possible. A letter belongs in each box of the sentence below. Pick a box you want to fill in from the sentence below and find the item number under that box. Go to that item number in the first column of Table 1. Next, convert what appears in the second column in Table 1 to the base in the third column of Table 1. After you convert, find your answer in Table 2. The letter in the second column of Table 2 next to your answer is the letter that belongs in the box you picked. Note that an item number can belong to more than one box below, so to minimize how many numbers you are converting, you may want to choose item numbers that appear under more than one box.

(1) (2) (3) (4) (3)
 (2) (5) (4)
 (6) (7) (8)
 (9) (10) (3) (8)

(11) (7) (5)
 (1) (2) (3) (4) (1) (2) (12) (12)