

9-27-18

~~Good~~ A good question for the next Exam:

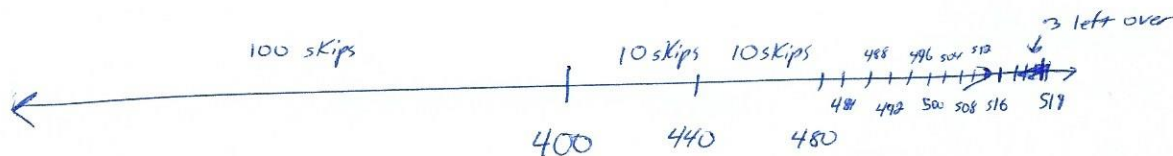
If we have 5 \$100 bills, 1 \$10 bill, and 9 \$1 bills and want to divide the money evenly between 4 people with a remainder less than 4. How many \$100 bills will need to be exchanged for a lower denomination?

1

$$5 = 1 \cdot 4 + 1$$

Skip Counting:

Divide 519 by 4:



$$(100 + 20 + 9) \times 4 + 3 = 129 \times 4 + 3$$

12,860,413 by 1,000,037



$$12,860,413 = 12 \times 1,000,037 + 859$$

00	01	02	03	04	05
10	11	12	13	14	15
20	21	22	23	24	25
30	31	32	33	34	35
40	41	42	43	44	45
50	51	52	53	54	55

Long-Division in Base 6: 0, 1, 2, 3, 4, +5

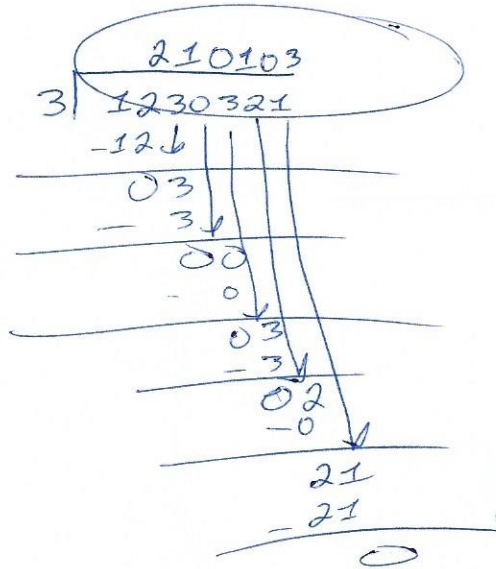
$$\begin{array}{r}
 113 \\
 4 \overline{) 502} \\
 \underline{-4} \\
 10 \\
 \underline{-04} \\
 22 \\
 \underline{-20} \\
 2
 \end{array}$$

$$502 = 113 \times 4 + 2$$

$$\begin{array}{r}
 02054 \\
 4 \overline{) 12345} \\
 \underline{-0} \downarrow \\
 12 \\
 \underline{-12} \downarrow \\
 03 \\
 \underline{-0} \downarrow \\
 34 \\
 \underline{-32} \downarrow \\
 25 \\
 \underline{-24} \\
 1
 \end{array}$$

$$12345 = 2054 \times 4 + 1$$

00	01	02	03
10	11	12	13
20	21	22	23
30	31	32	33



12	13	11	19
24	25	22	30
36	37	33	41
48	49	44	52
60	61	55	63
72	73	66	74
84	85	77	85
		88	96