Modulus

int Integer

Whole Numbers

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x + y = z

z − y = x

z − x = y

x / y = z

$\frac{4}{3} = 1\frac{}{}$

$13

$\frac{13}{5} = 2\frac{}{}$

$13 \% 5 = 3^{w}$

$13 / 5 = 2$

$x \quad y \quad z$

Remainder Math

$2w^{x} = y$ ①

$2wy = x$ ②

$x / y = z$ (1)

16 9

$x \% y = w$ (2)

7

$5 = 3 + 2$ ✓

$(2+13)/3 = 5$ ✓

$(13-3)/2 = 5$ ✓

$y = \frac{(x-w)}{z}$

$x = (z \cdot y) + w$

$16 - 7 \quad \sqrt{9} \quad \frac{9}{1} = 9$

$\frac{1+16}{7} \quad \frac{17}{7} \quad 2$

1 2 3 1 2 3 1 2 3 1

sn%3 1 2 0 1 2 0 1 2 0

sn 1, 2, 3, 4, 5, 6, 7, 8, 9, ...

g(sn) 1 2 3 1 2 3 1 2 3

x%n = x%3 = 0

0 to n-1

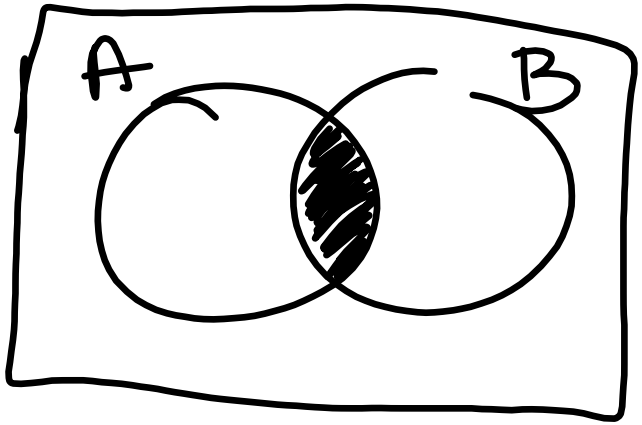
$$g(sn) = \begin{cases} sn\%3 & \text{if } sn\%3 != 0 \\ 3 & \text{else} \end{cases}$$

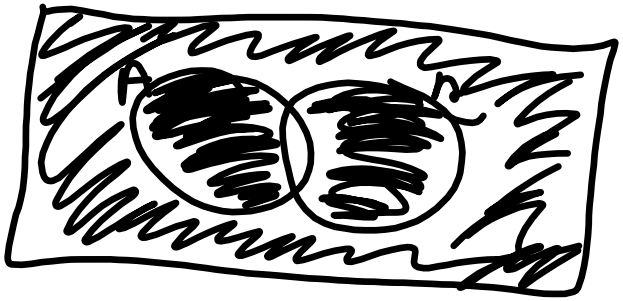
Algorithm

$g(Sn) = ((Sn - 1) \% 3) + 1$

goal =	1	2	3	1	2	3	1	2	3
Sn =	1	2	3	4	5	6	7	8	9
Sn-1 =	0	1	2	3	4	5	6	7	8 (Sn-1%3)
(Sn-1)%3 =	0	1	2	0	1	2	0	1	2
g(sn) =	1	2	3	1	2	3	1	2	3 +1

A && B





! (A && B)