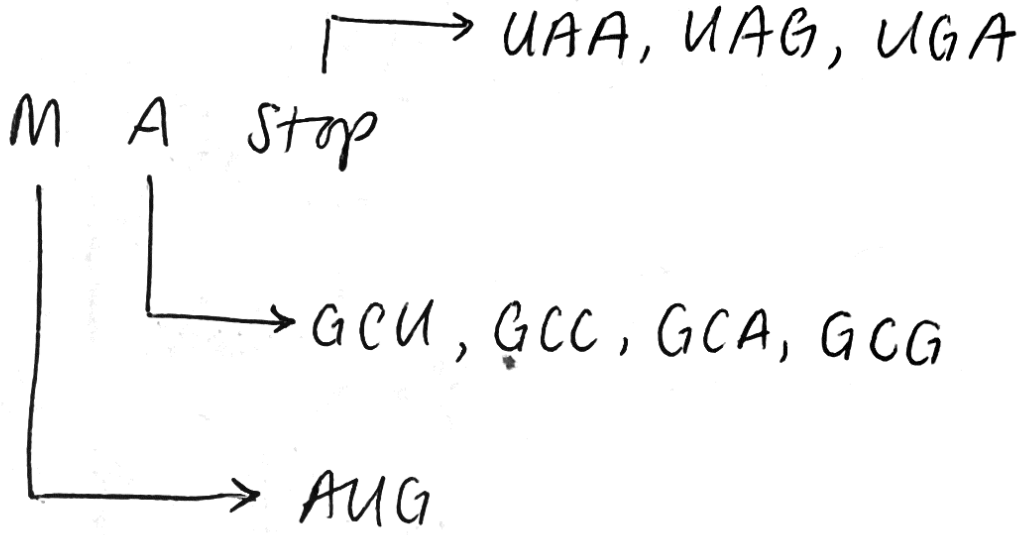
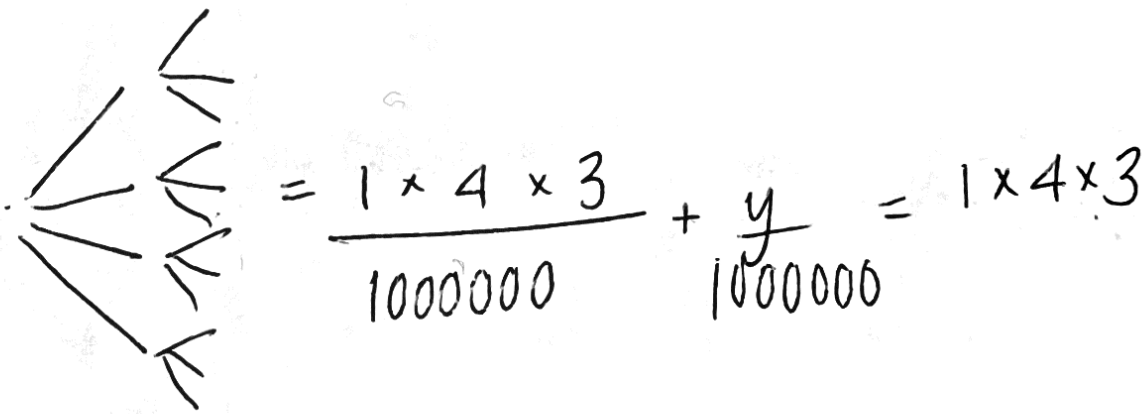


~~11! 4! 3!~~



(1//mod, 1%mod)
(4//mod, 4%mod)
(3//mod, 3%mod)
} mult

0 ≡

12 % mod = n

mod 2

answer = 127.2 = 0 = n

17.2 = 1

47.2 = 0

37.2 = 1

sum = 2

27.2 = 0

prod = 0

07.2 = 0

Take modulus of each term; multiply the results; take the modulus of the product

mod 5

127.5 = 2 = n

17.5 = 1

47.5 = 4

37.5 = 3

sum = 8

87.5 = 3

prod = 12

127.5 = 2

$a \equiv b \bmod n$ ~ a and b are congruent mod n

true when:

$a \bmod n = b \bmod n$

if $a \equiv b \bmod n$ and $c \equiv d \bmod n$

then $a + c \equiv b + d \bmod n$

$a = 29 \quad 29 \bmod 11 = 7$

$b = 73 \quad 73 \bmod 11 = 7$

$c = 10 \quad 10 \bmod 11 = 10$

$d = 32 \quad 32 \bmod 11 = 10$

$n = 11$

~~$7 + 10 \bmod 11 = 6$~~

$(29+10) \bmod 11 = 6$

$(73+32) \bmod 11 = 6$

and $a \times c \equiv b \times d \bmod n$

$(29 \times 10) \bmod 11 = 4$

$(73 \times 32) \bmod 11 = 4$

$(7 \times 10) \bmod 11 = 4$