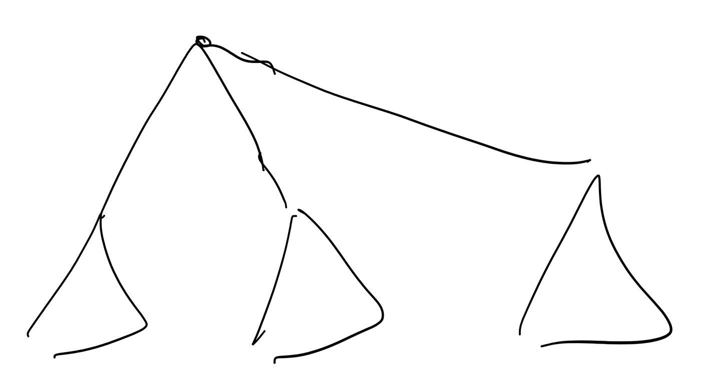
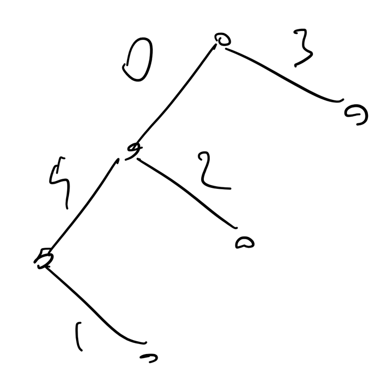
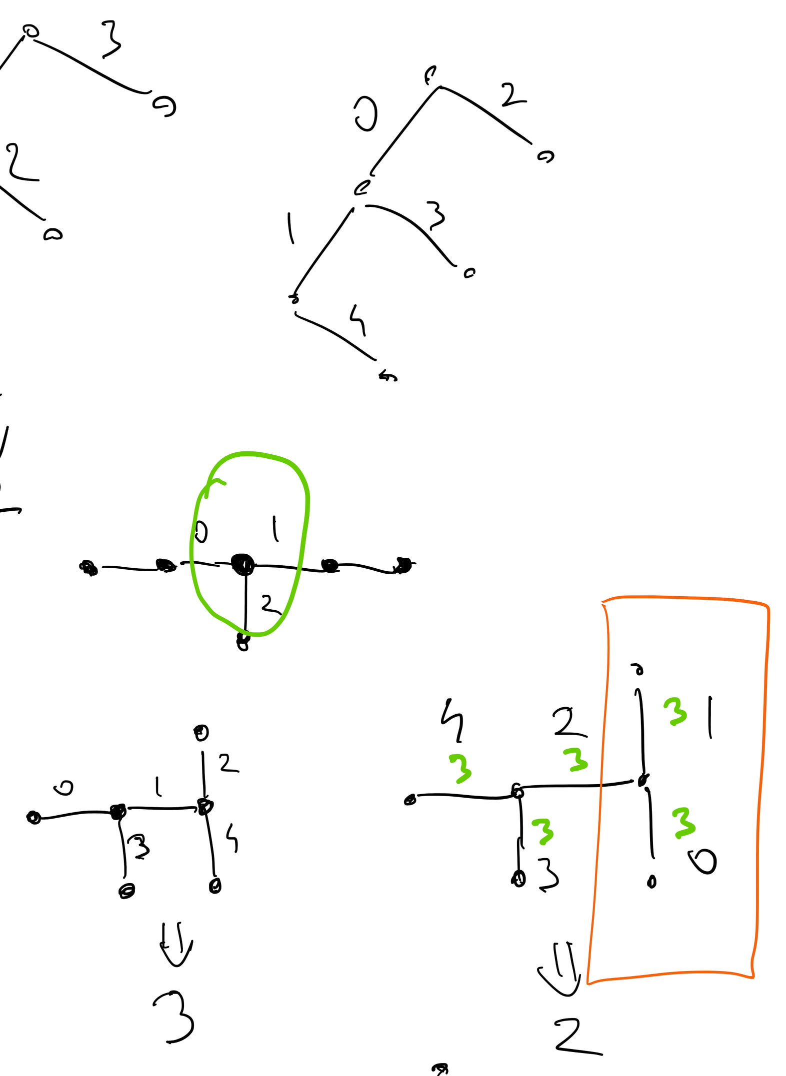
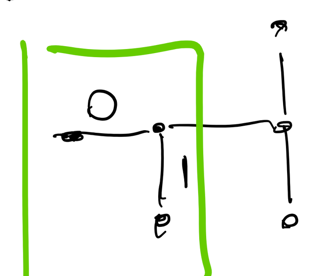
R-628

Saturday, 16 January 2021 14:32



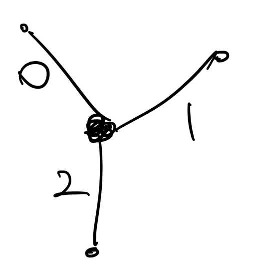




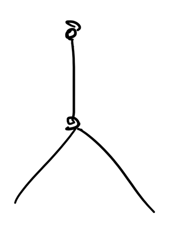


rest doesn't matter

Key:



If such intersection not present we have a line....



2 4

1 0 $+2$

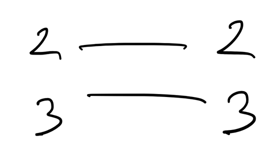
1 3

0 1 $+2$

1 1 1

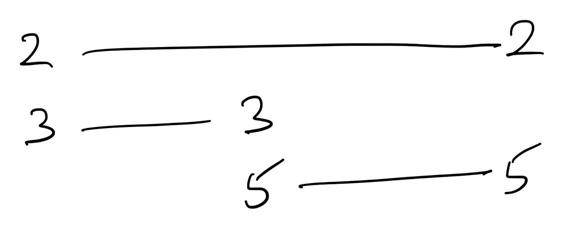
2^7 !

2 3 6 6



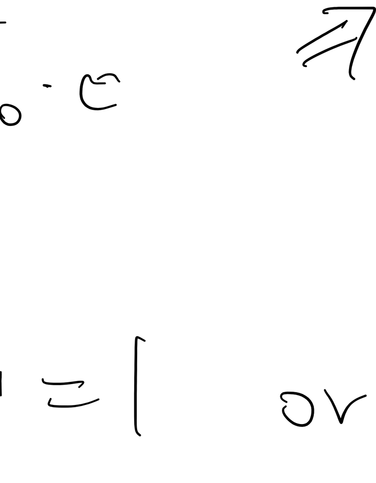
Keep track of parity

6 15 10



$7 \cdot 10^5$ divisors max

78k primes $\leq 10^6$



$V = p_1^{q_1} \cdot p_2^{q_2} \cdot \ldots \cdot p_n^{q_n}$

≤ 8 divisors $\Rightarrow$ at most two primes

$V = a \cdot b \cdot c \Rightarrow$ divisors: $1, a, b, c, ab, bc, ac, abc$ X

so: $V = 1$ or $V = p$ or

$V = p \cdot q$ // p, q prime

we need to find:

$V = 1$ win!

$V_1 = p$ $V_2 = p$ win!

otherwise find shortest cycle