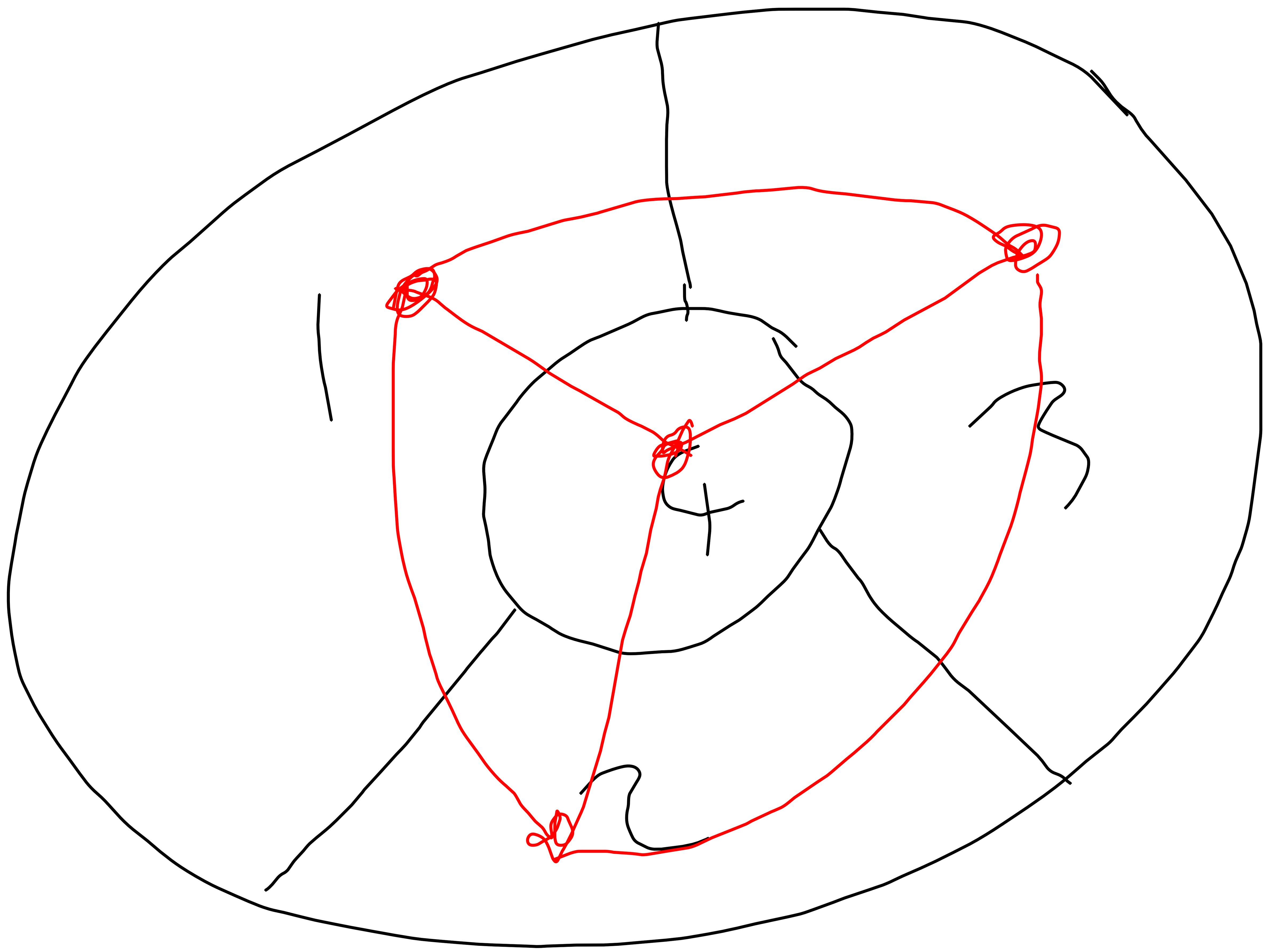
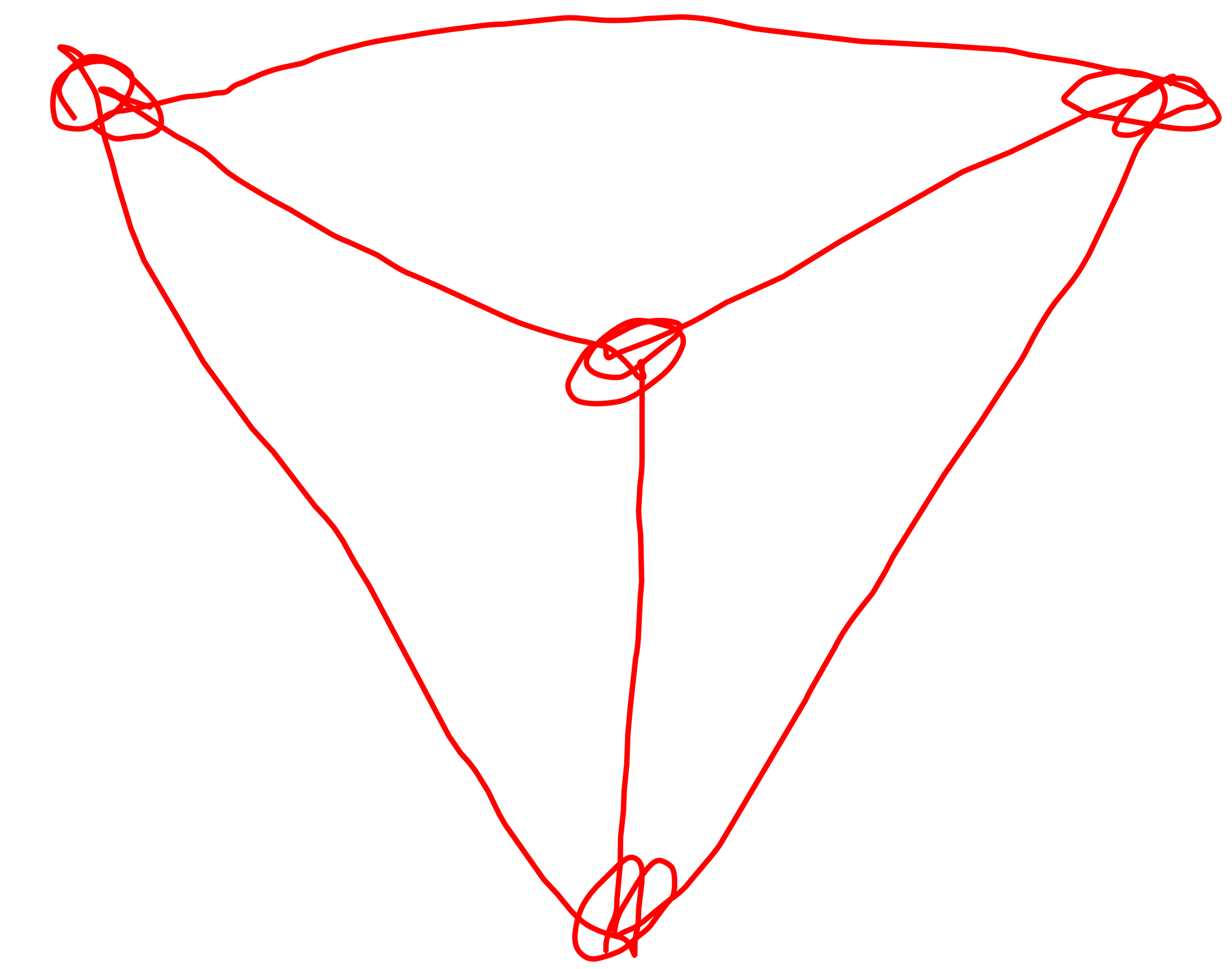
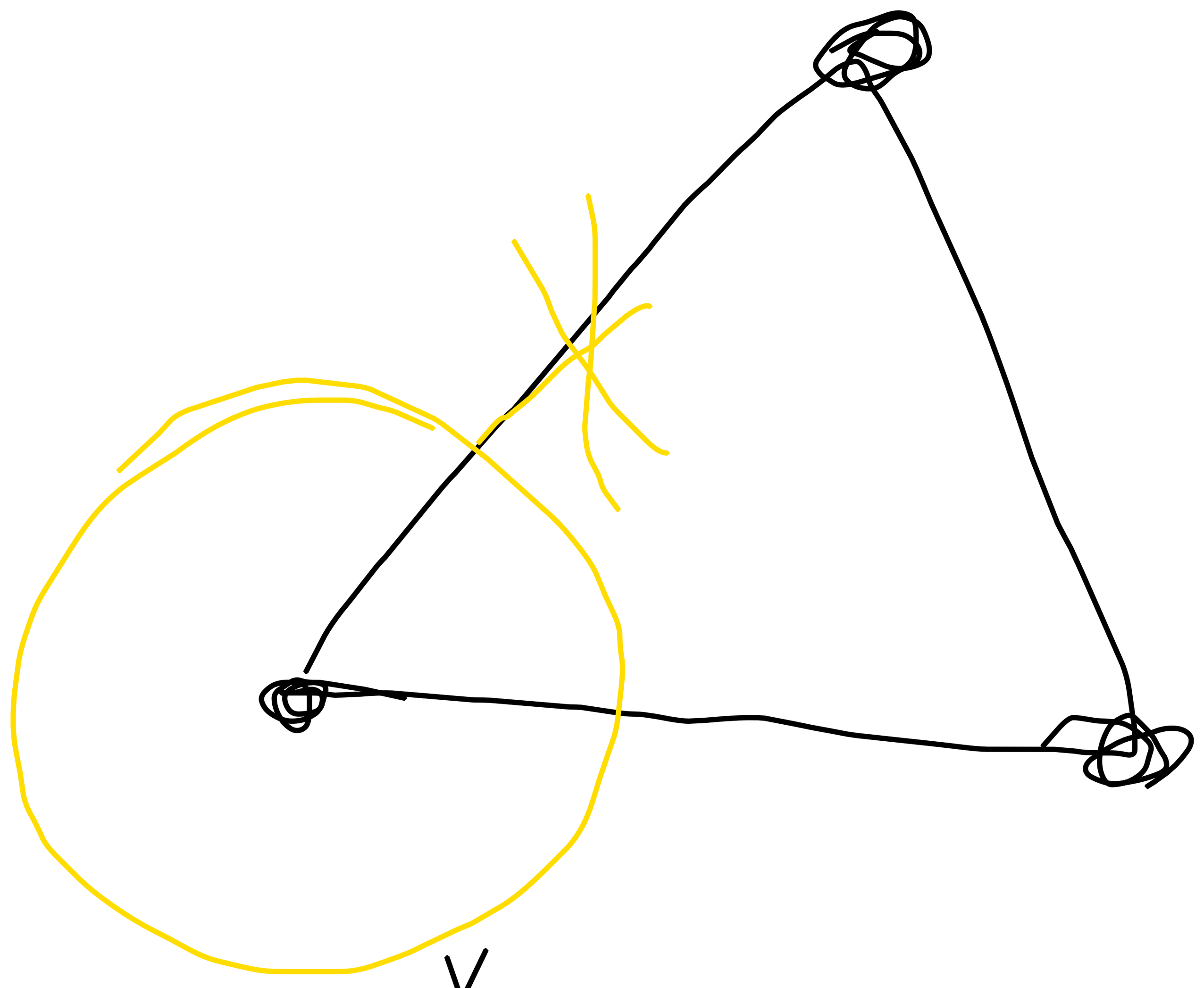
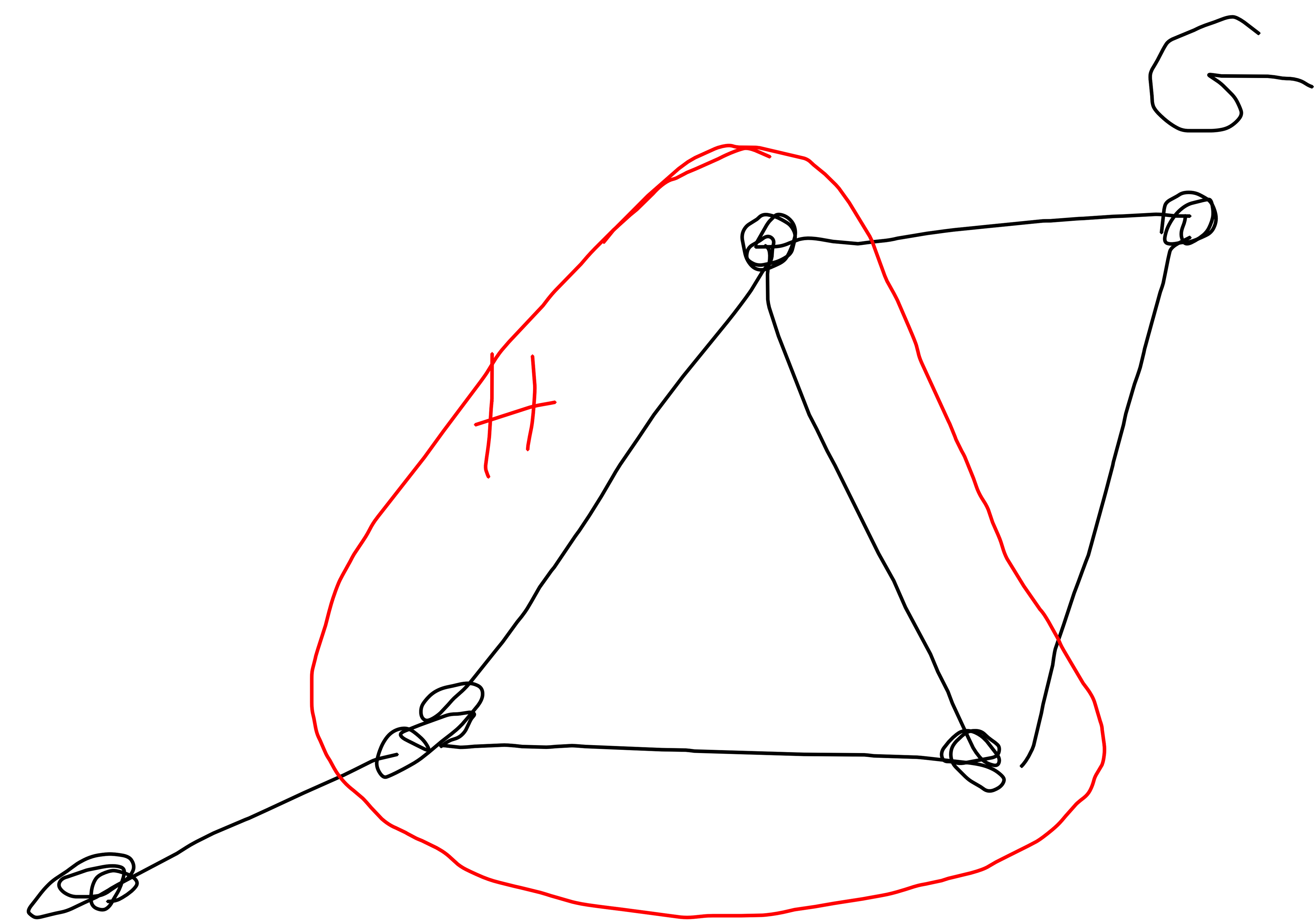




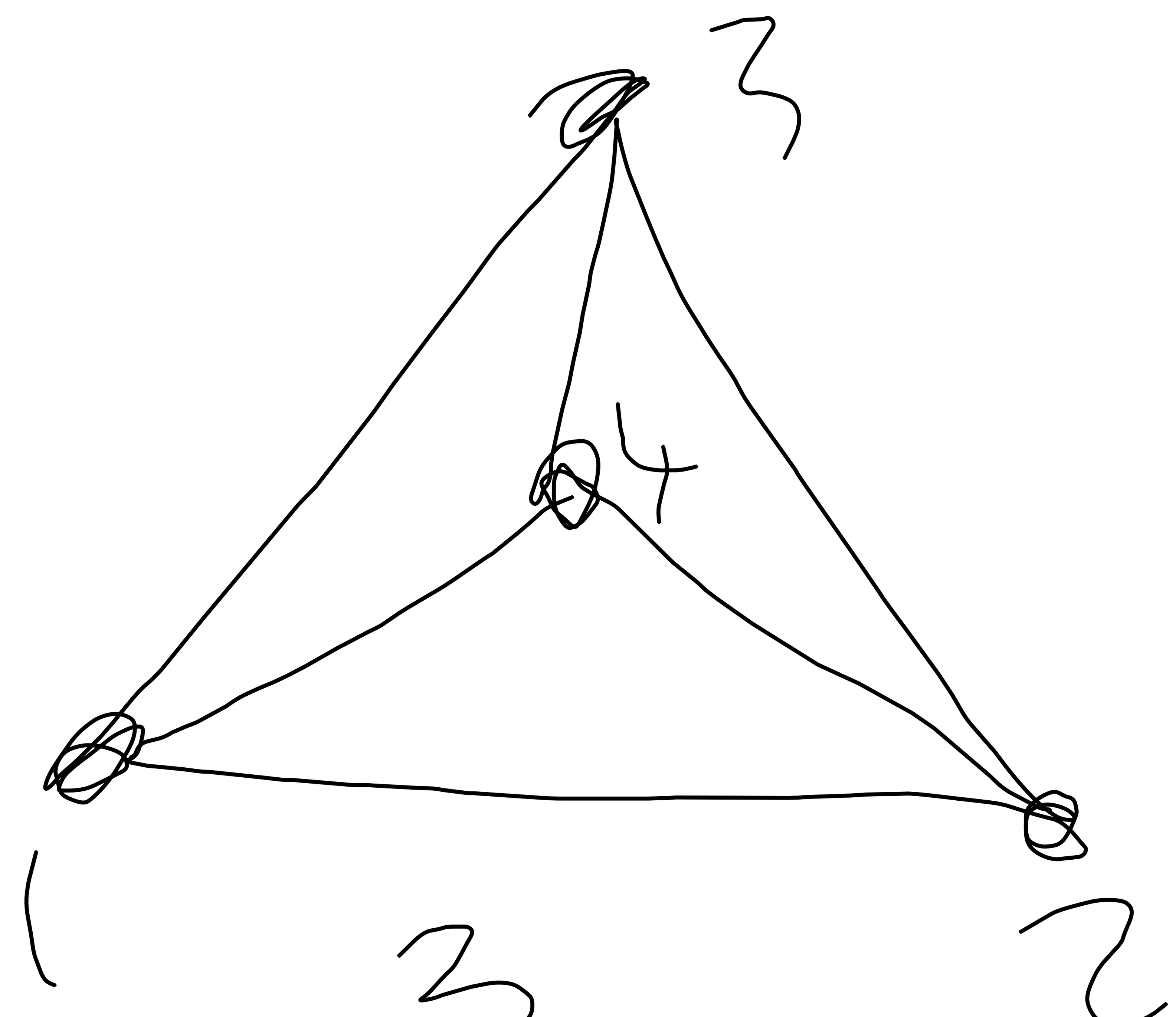




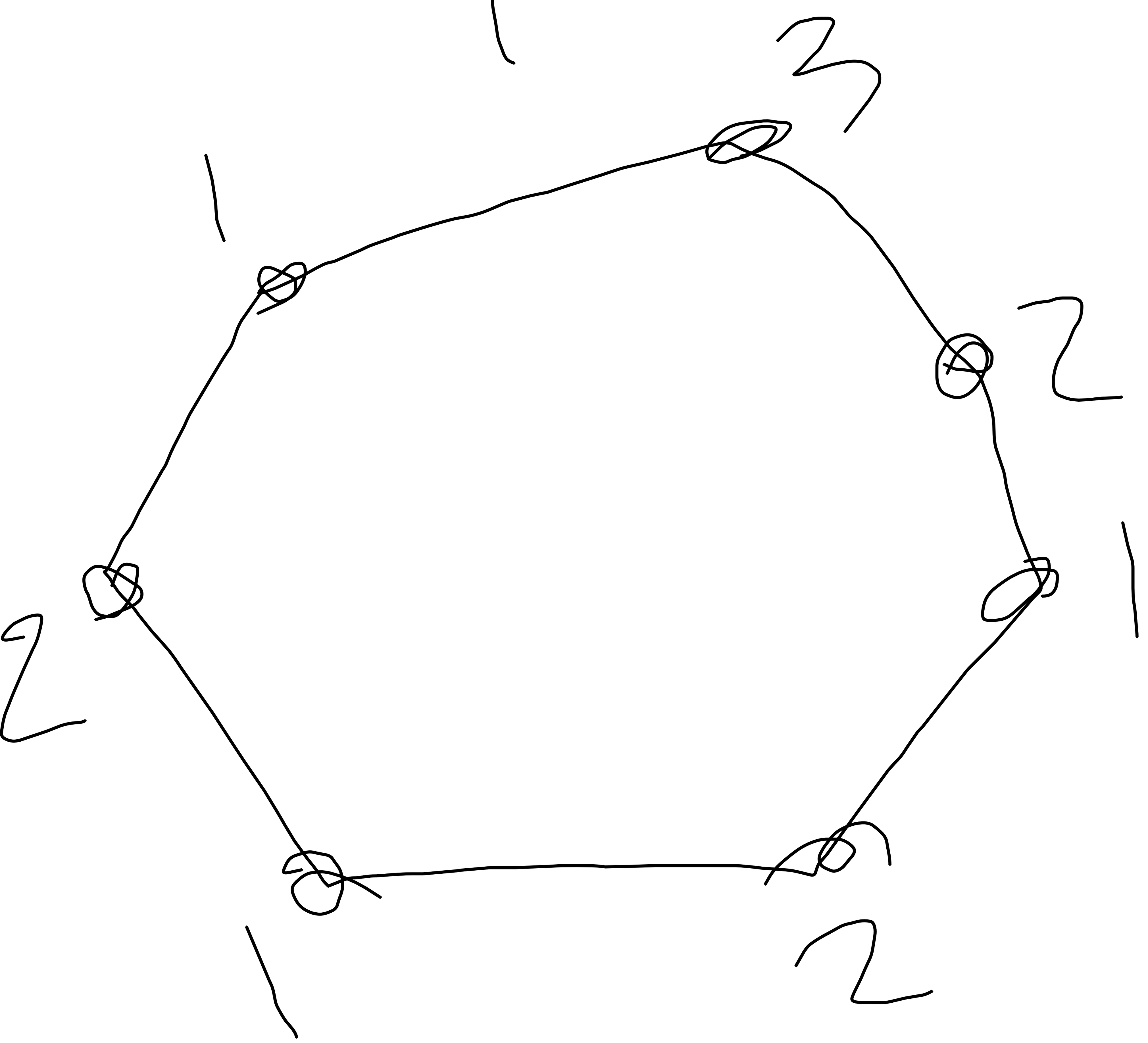
$\Delta > k - 1$

$k < \Delta + 1$

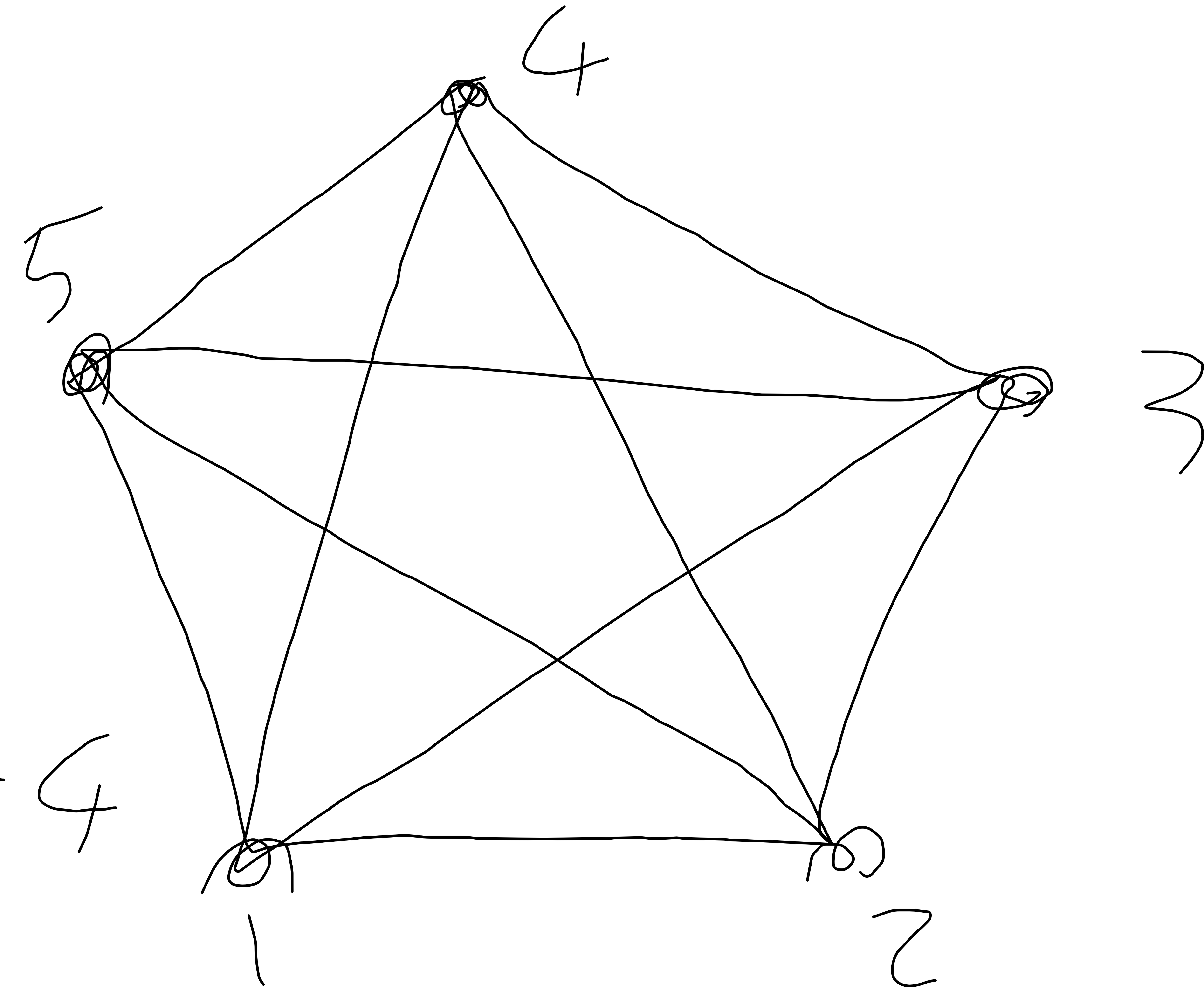
K_4

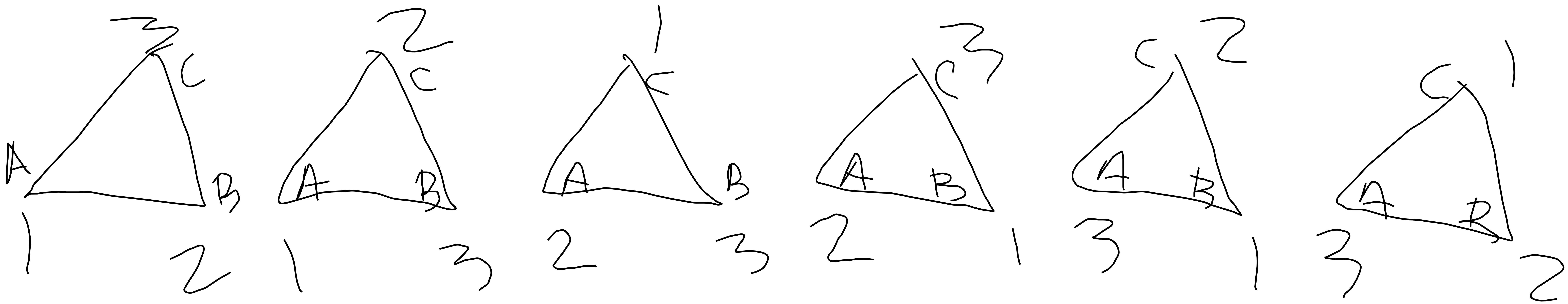


$\Delta = 3$



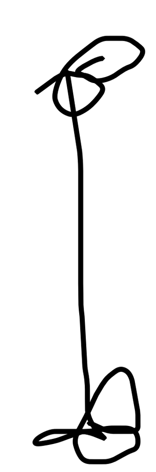
$\Delta = 4$





$\pi_3(G) = 6$

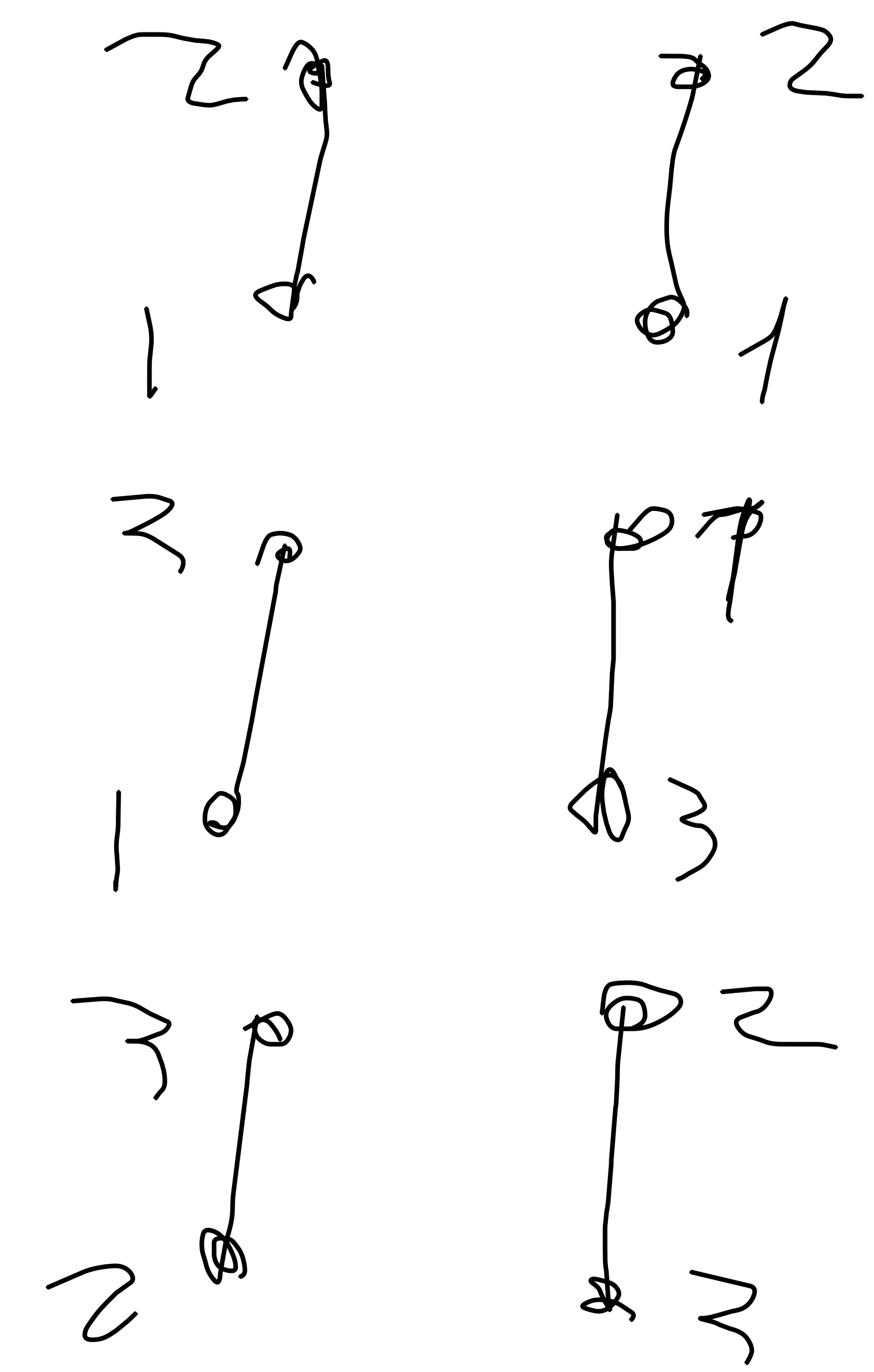
G

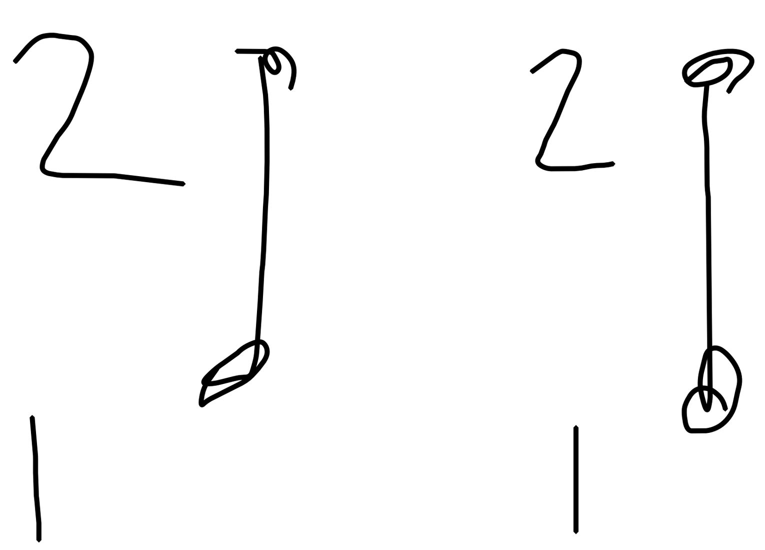


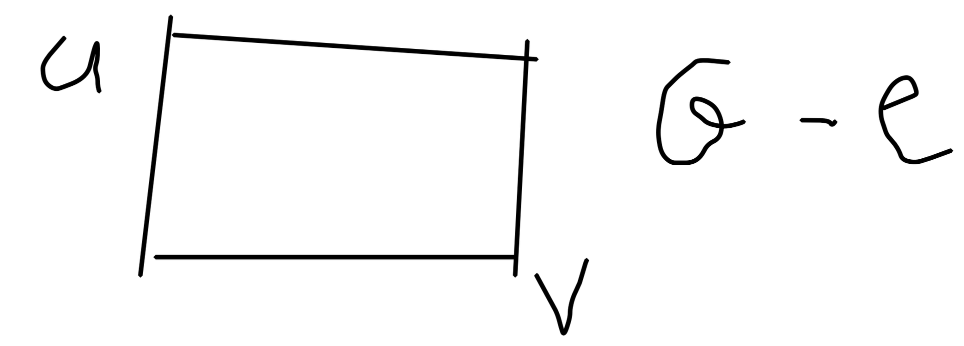
$\pi_1(G) = 0$

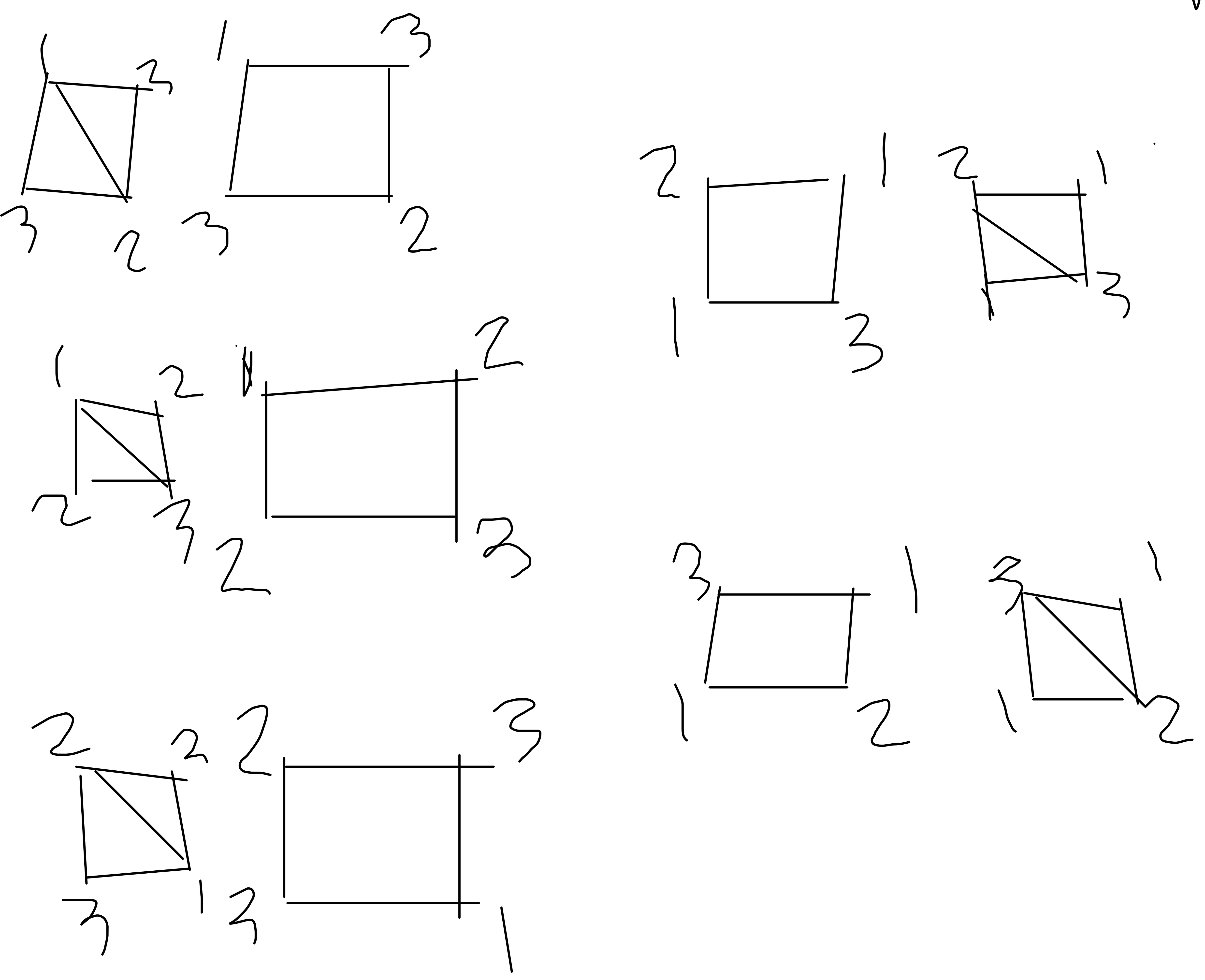
$\pi_2(G) = 2$

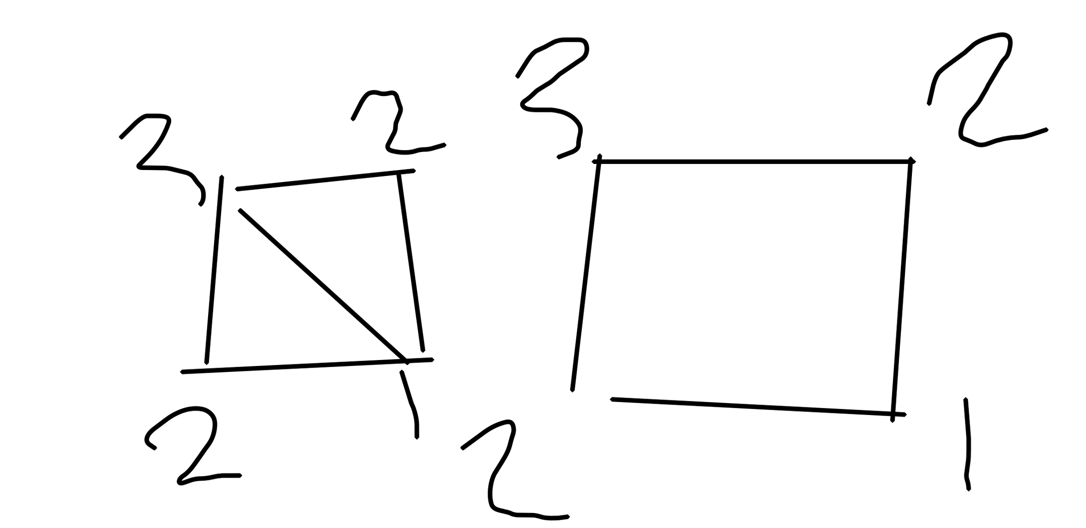
$\pi_3(G) = 6$

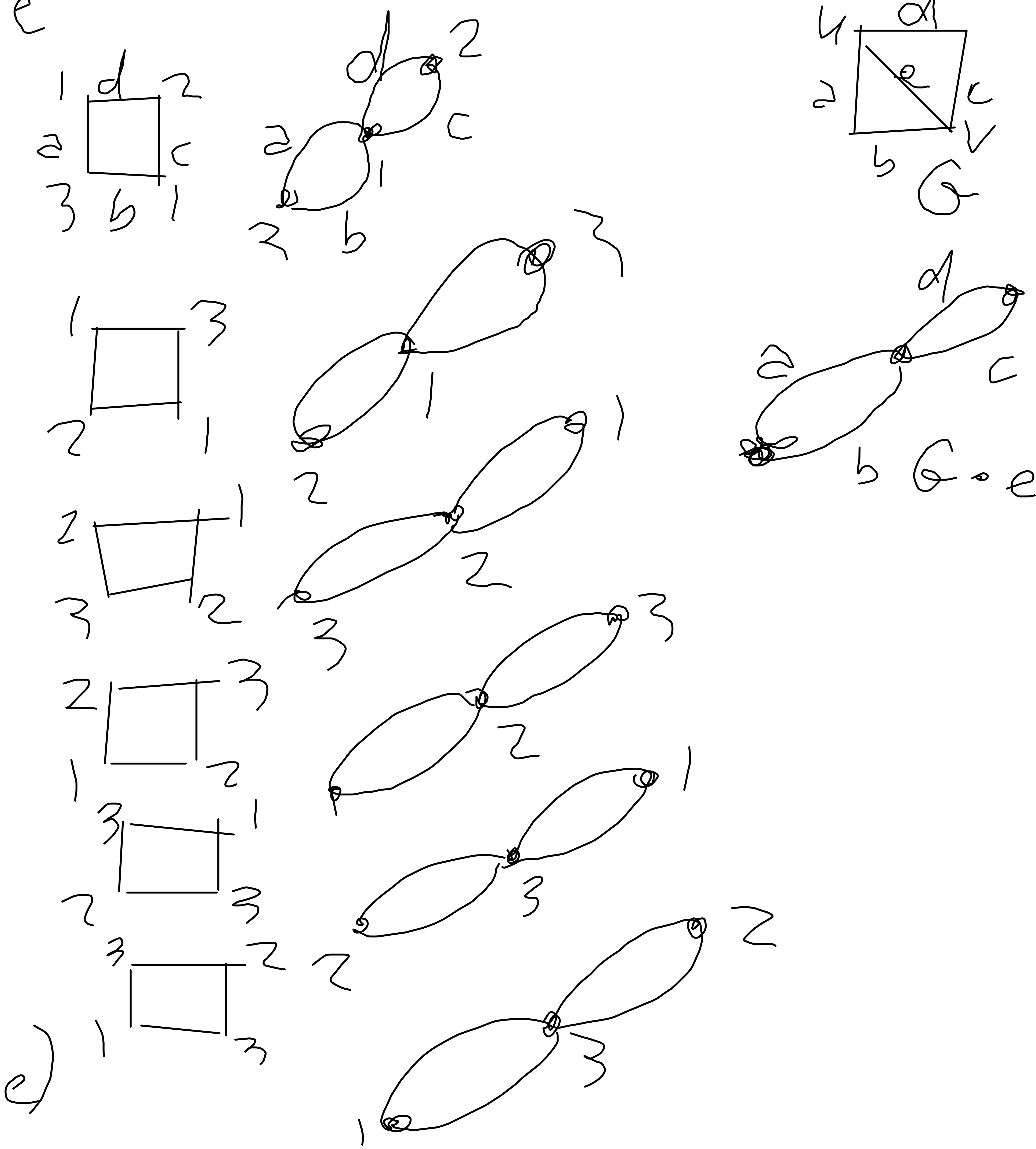






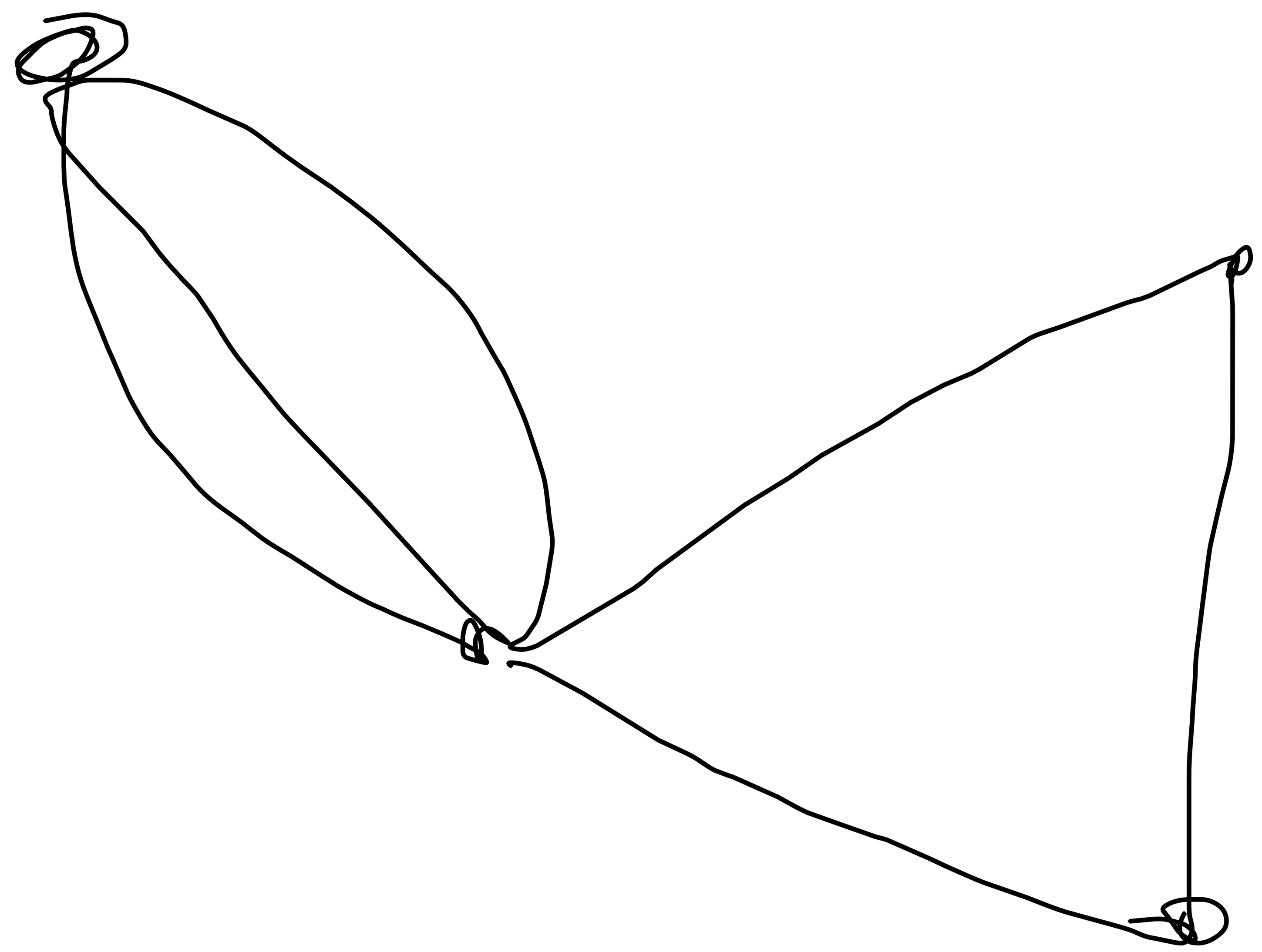




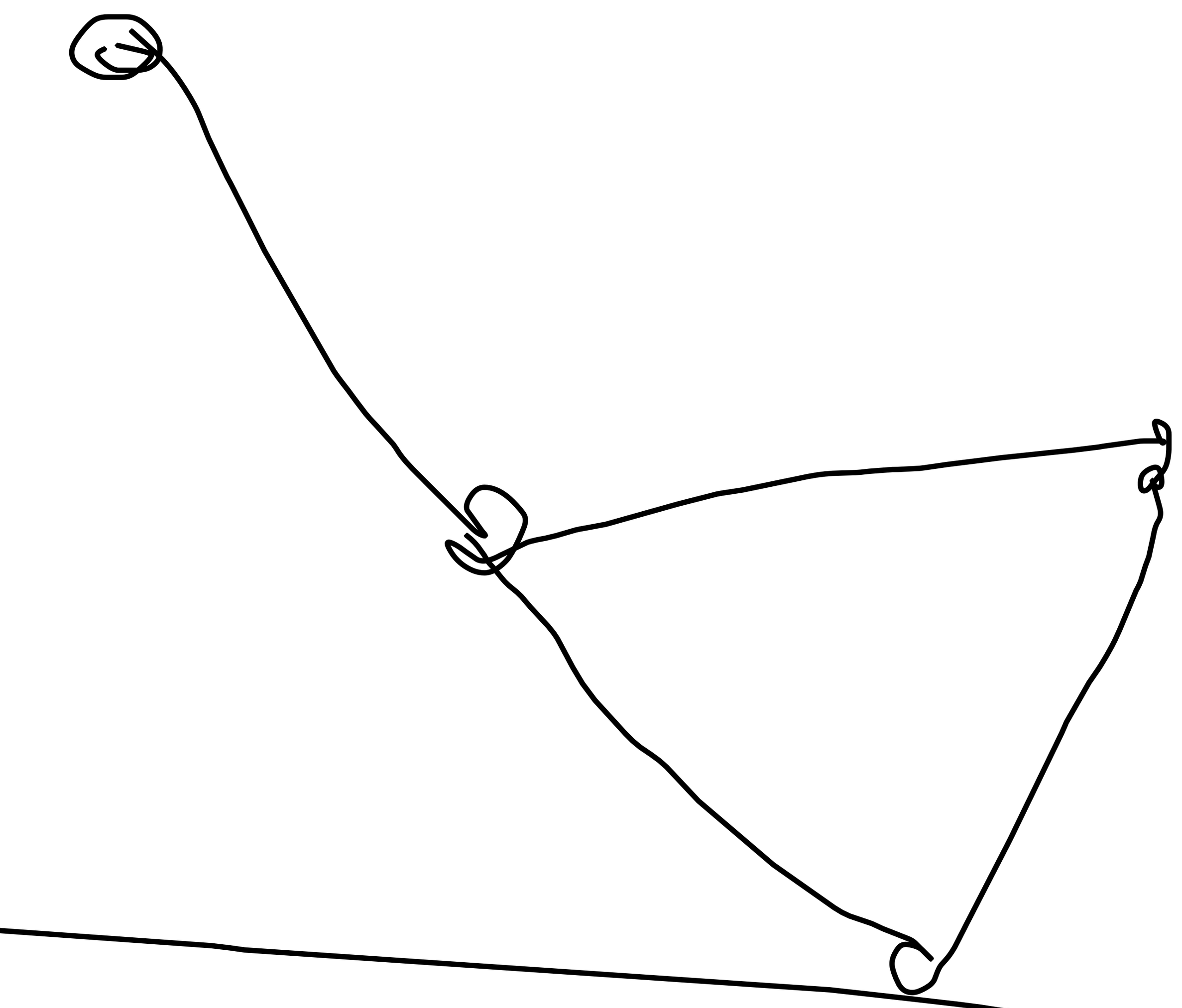


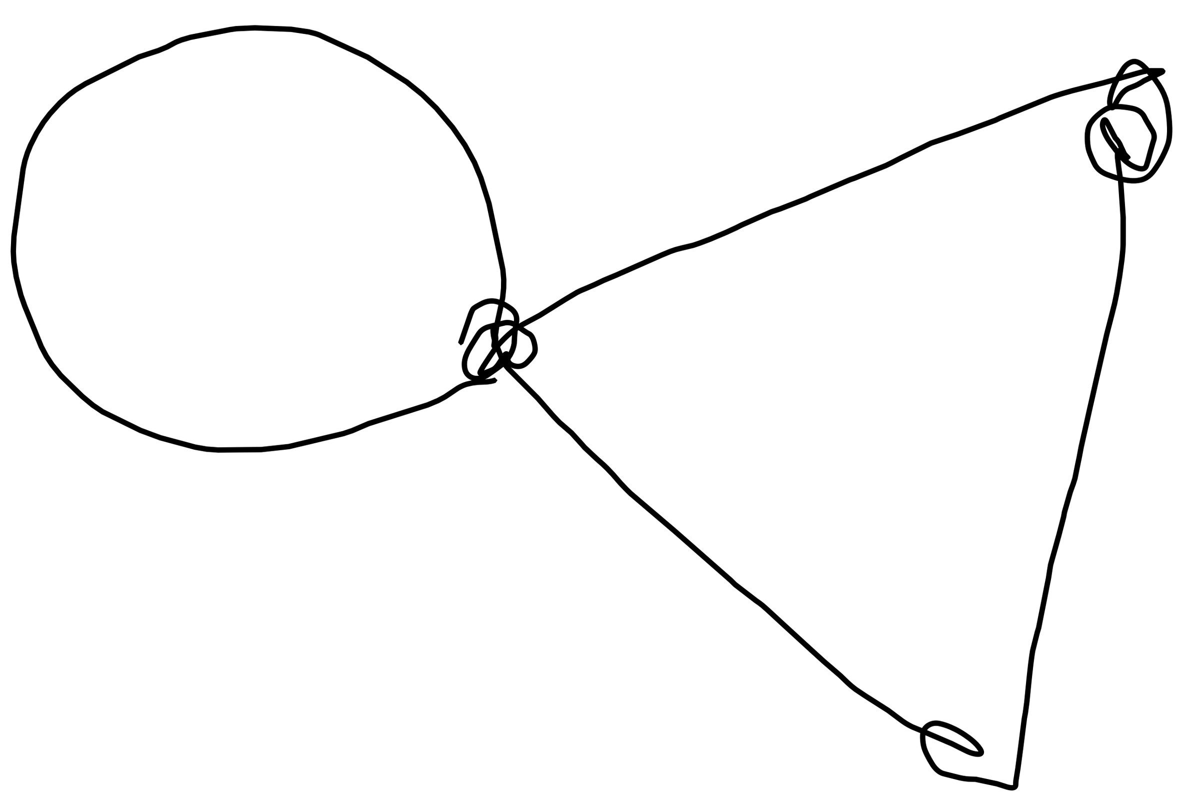
$$\pi_k(G - e) = \pi_k(G) + \pi_k(G \cdot e)$$

Tricks



has same π_1 as





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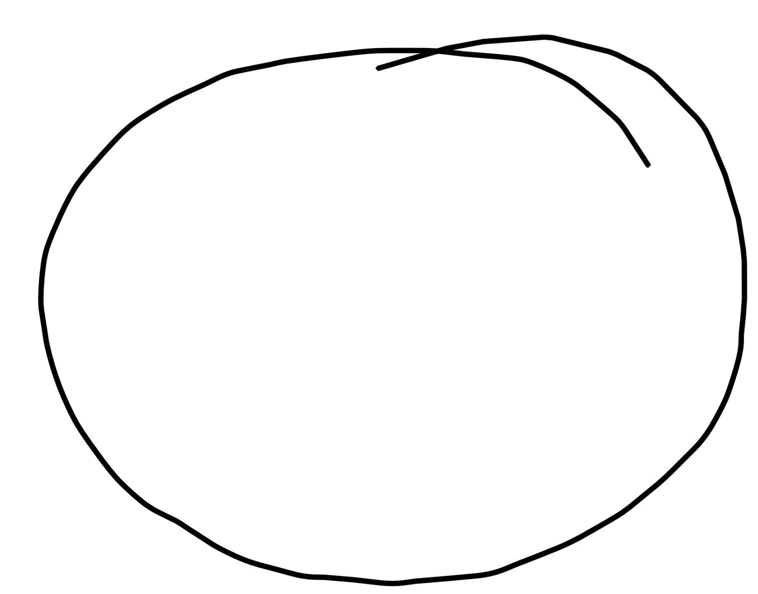
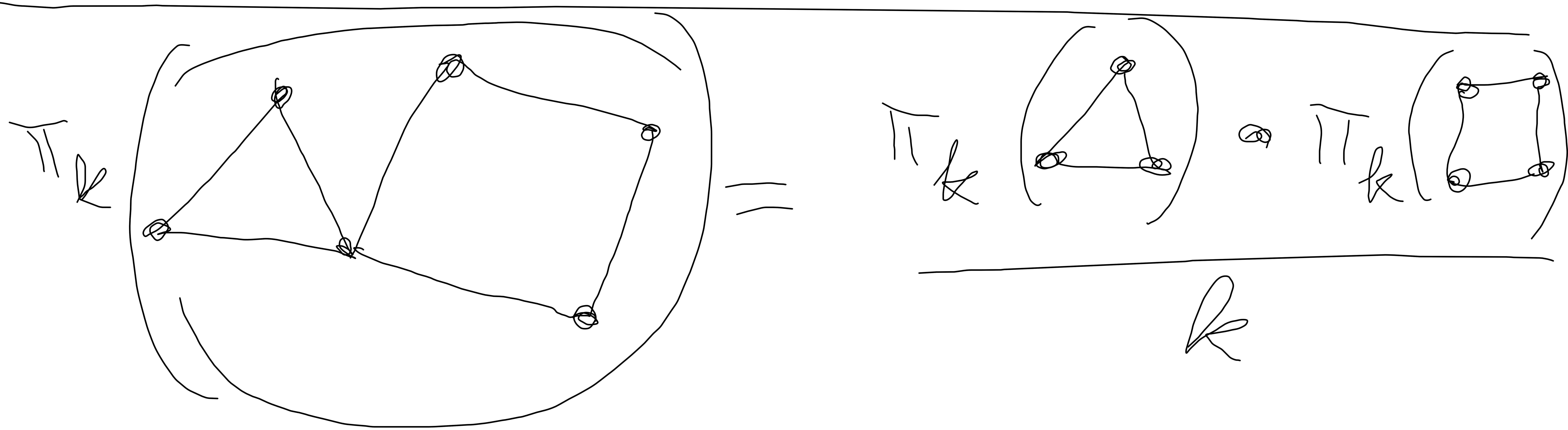


Πk
=
Πk
·
Πk



Πk
=
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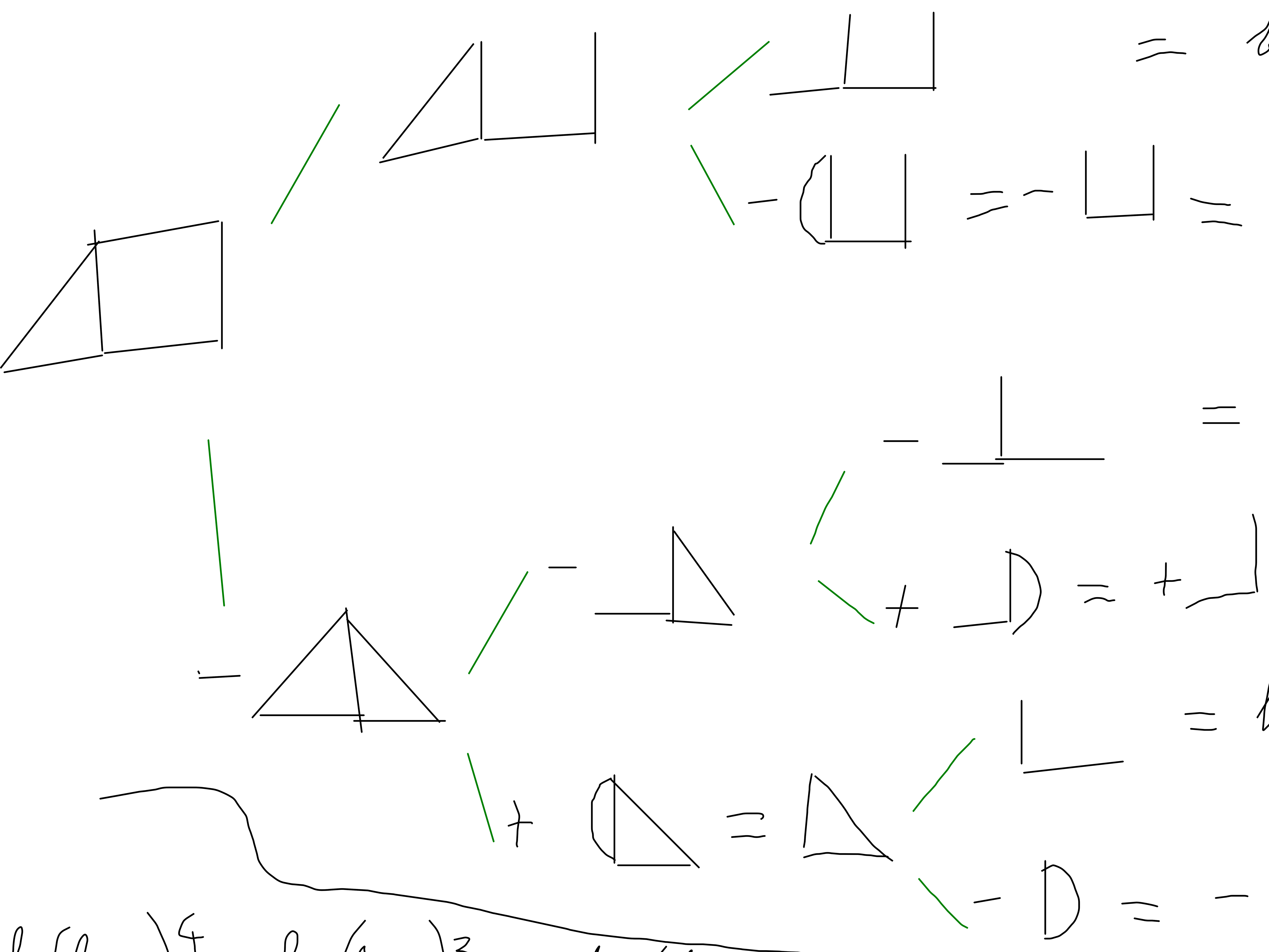
Πk
k



$$= k(k-1)^4$$

$$= -k(k-1)^3$$

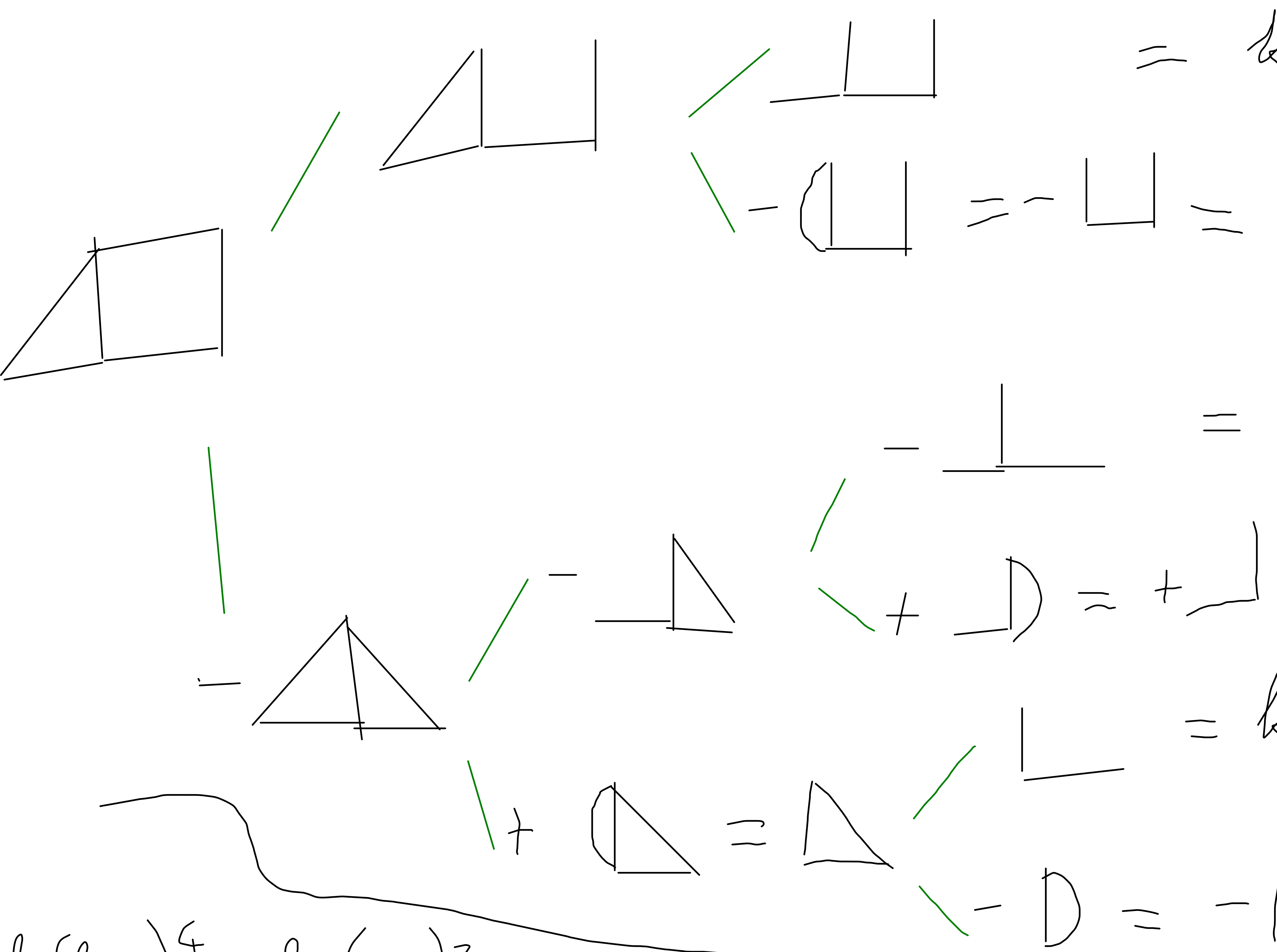
$$= -k(k-1)^3$$

$$= k(k-1)^2$$

$$= k(k-1)^2$$

$$= -k(k-1)$$

$$k(k-1)^4 - 2k(k-1)^3 + 2k(k-1)^2 - k(k-1)$$



$= k(k-1)^4$

$= -k(k-1)^3$

$= -k(k-1)^3$

$= k(k-1)^2$

$= k(k-1)^2$

$= -k(k-1)$

$$k(k-1)^4 - 2k(k-1)^3 + 2k(k-1)^2 - k(k-1)$$

1 1

1 2 1

1 3 3 1

1 4 6 4 1

$$k(k-1)^4 - 2k(k-1)^3 + 2k(k-1)^2 - k(k-1)$$

$$k^5 - 4k^4 + 6k^3 - 4k^2 + k$$

$$-2k^4 + 6k^3 - 6k^2 + 2k$$

$$+2k^3 - 4k^2 + 2k$$

$$-k^2 + k$$

$$k^5 - 6k^4 + 14k^3 - 15k^2 + 6k$$

$uvv = uv$

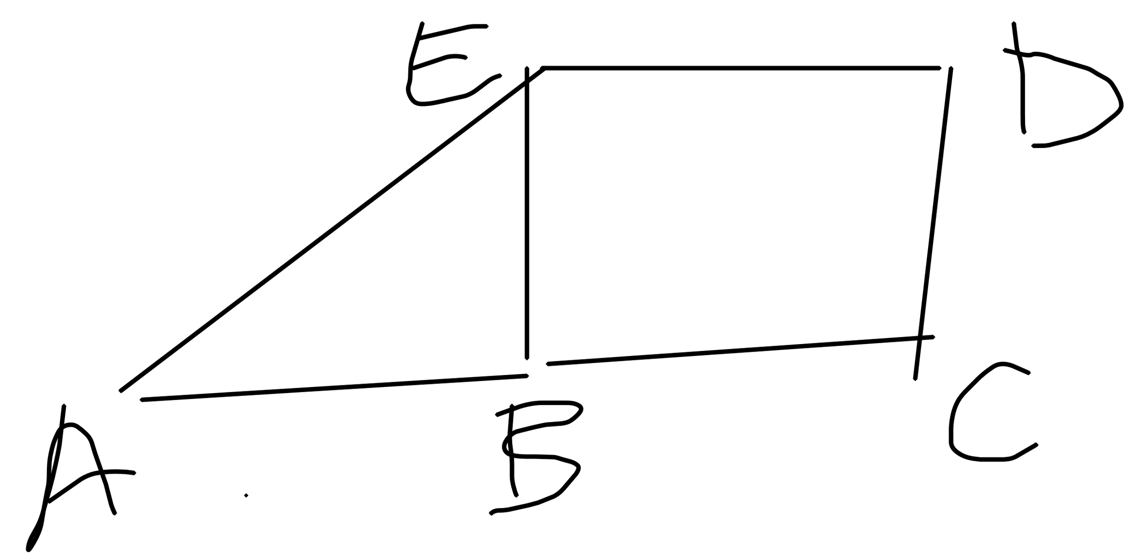
$vv = v$

and

v	v	$v \wedge v$
T	T	T
F	F	F

$u + uv = u$

u	v	uv $u \wedge v$	$u + uv$ or $u \vee (u \wedge v)$
T	T	T	T
T	F	F	T
F	T	F	F
F	F	F	F



$$(A+BE)(B+ACE)(C+BD)(D+CE)(E+ABD) =$$

$$(AB+AACE+BEB+BEACE)(\quad) = (AB+ACE+BE)(C+BD)(\quad) =$$

$$=(ABC+ABBD+ACEC+ACEBD+BEC+BEBD)(\quad) =$$

$$=(ABC+ABD+ACE+BEC+BED)(D+CE)(\quad) =$$

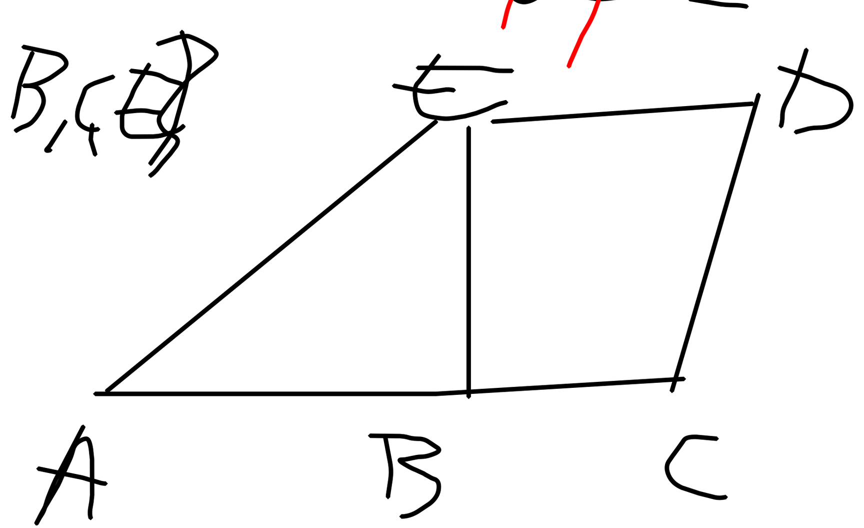
$$=(ABCD+ABCCE+ABDD+ABDCE+ACED+ACECE+BECD+BECCE+BEDD+BEDCE)(\quad) =$$

$$=(ABD+ACE+BEC+BED)(E+ABD) =$$

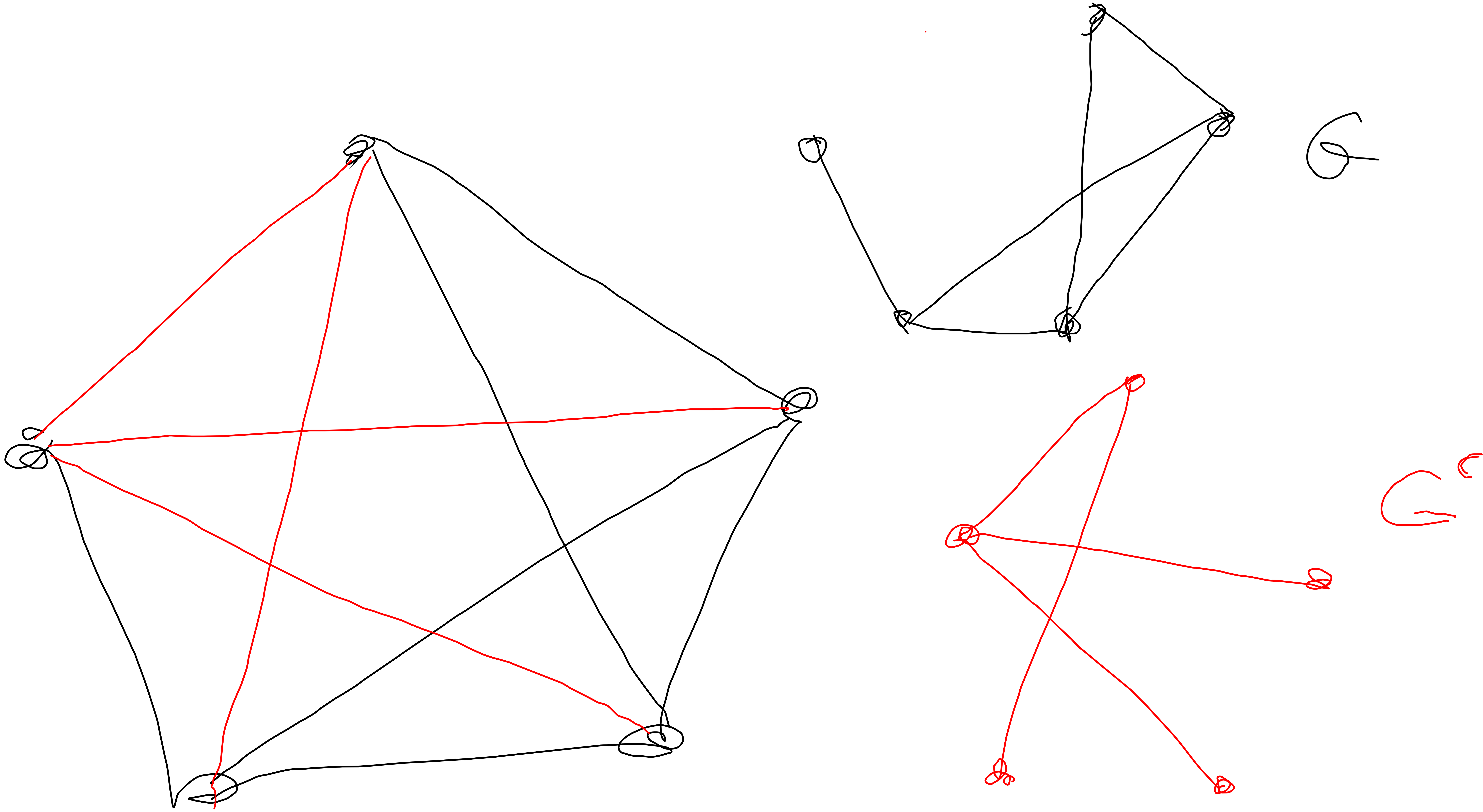
$$= ABDE + ABDABD + ACEE + ACEABD + BECE + BECABD + BEDE + BEDABD =$$

$$= ABD + ACE + BCE + BDE$$

Min covers: {A,B,D}, {A,C,E}, {B,C,E}, {B,E,D}



Max ind sets: {C,E}, {B,D}, {A,D}, {A,C}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