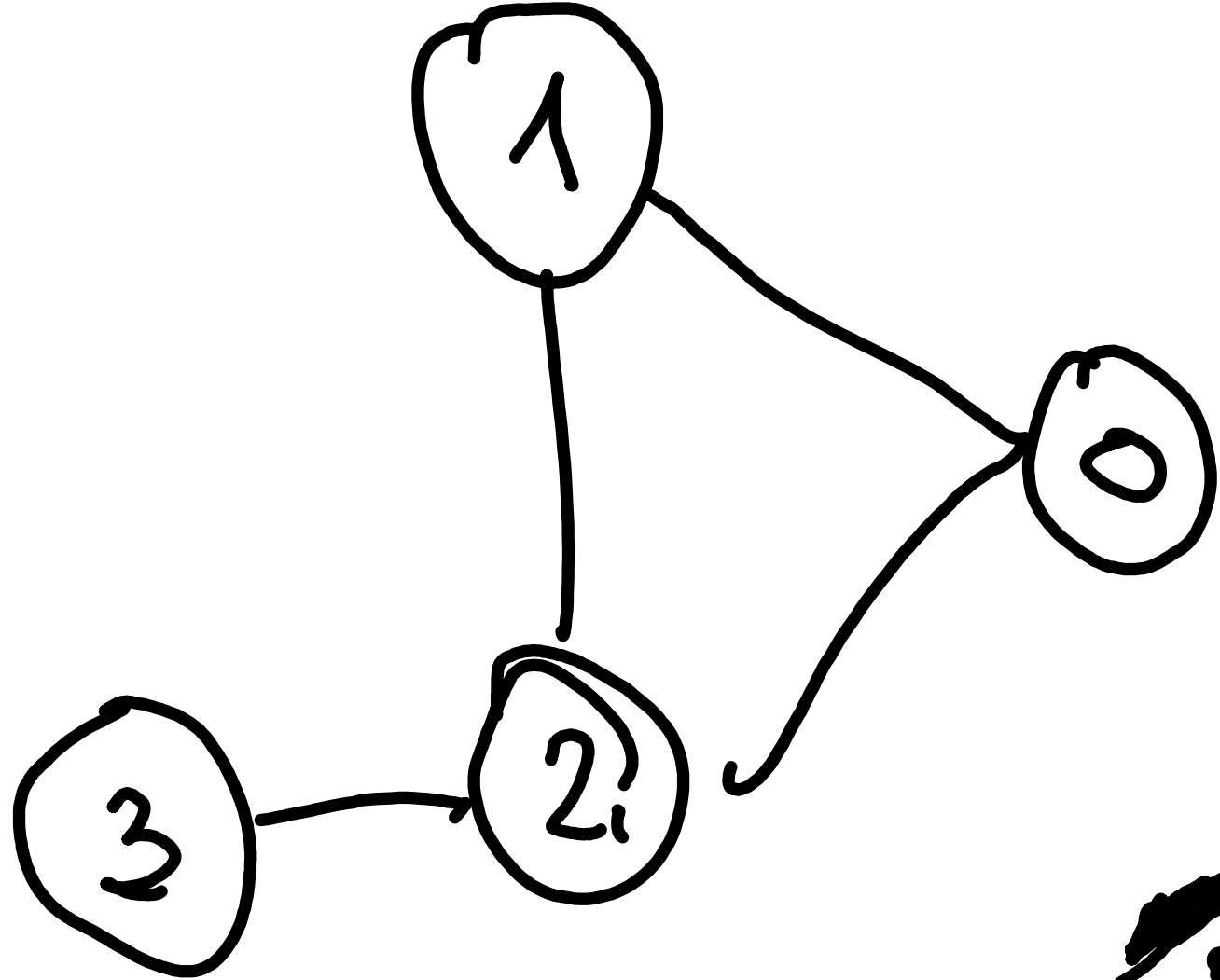


	1	2	3	4	5	6
1	0	1	0	0	1	0
2	1	0	1	0	1	0
3	0	1	0	1	0	0
4	0	0	1	0	1	0
5	1	1	0	1	0	1
6	0	0	0	1	0	0



②
 0 1 1
 1, 1, 0, 0
 ②
 0 2
 1, 0, 1, 0
 ②
 0 3
 1, 0, 0, 1
 ②

penkya
konkitya -
tyarna

③
 0 1 1 2 3
 ② 1, 1, 1, 1

1 2 3
 0, 1, 1, 1
 ②

0 2 3
 1, 0, 1, 1
 ②

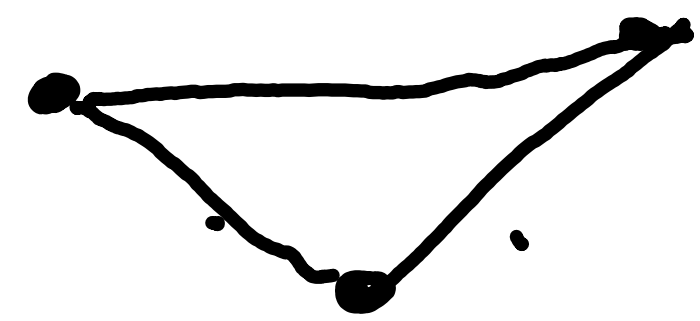

0 1 3
 1, 1, 0, 1

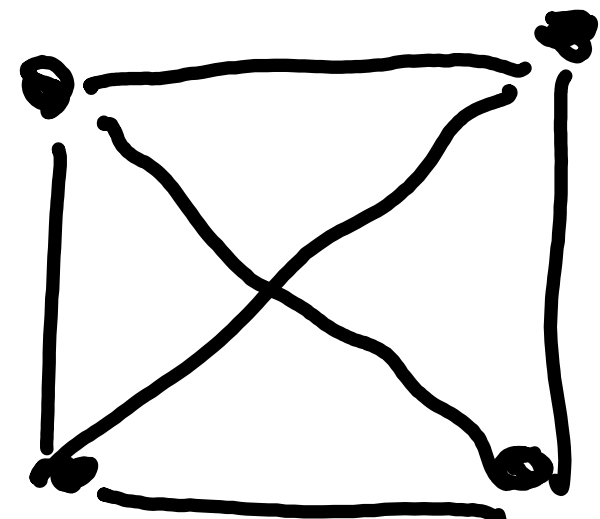
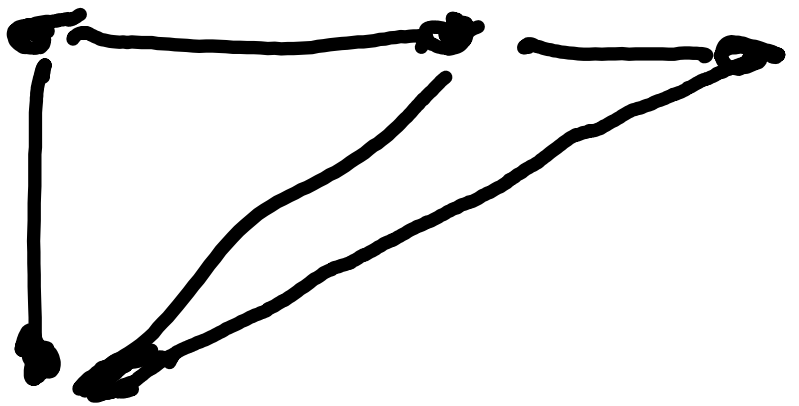
③
 0 1 2
 1, 1, 1, 0


1 2
 0, 1, 1, 0
 ②
 1 3
 ② 0, 1, 0, 1

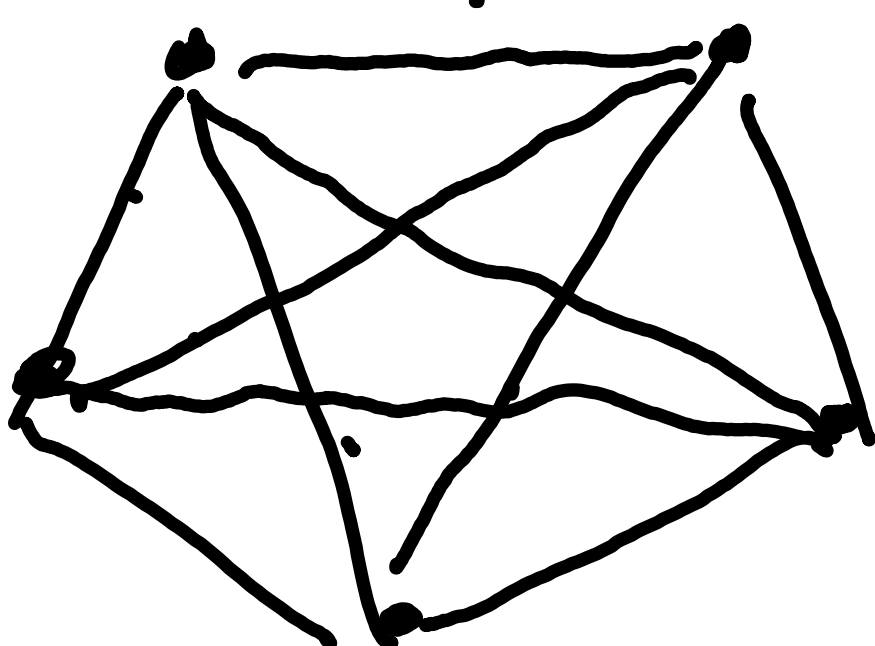
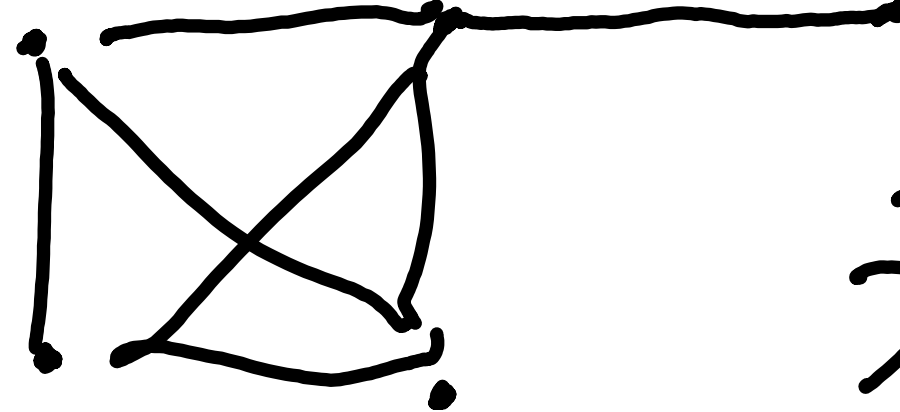
2, 3
 0, 0, 1, 1
 ② 1 2 3
 0 1 0
 1 1 1 0
 1 2 1 1 0
 1 3 0 0 1 0

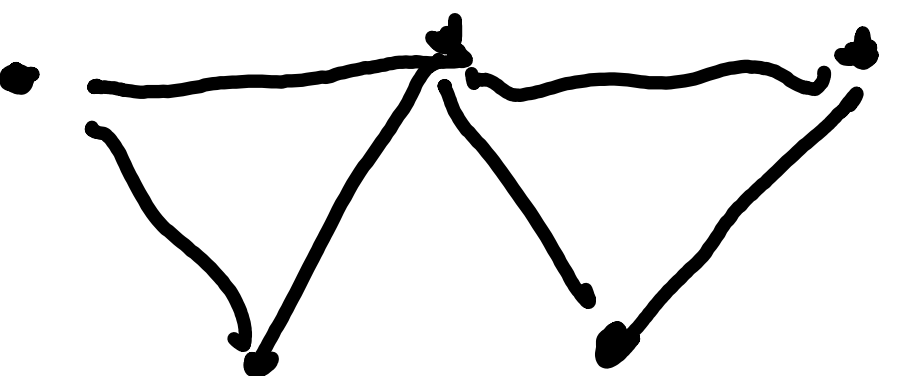
①  2000 $\cdot \frac{0}{1} \cdot 2000 = 0$

②  3000  $\frac{2}{3} \cdot 3000 = 2000$

③  4000  $\frac{4}{6} \cdot 4000 = 2666 \dots$

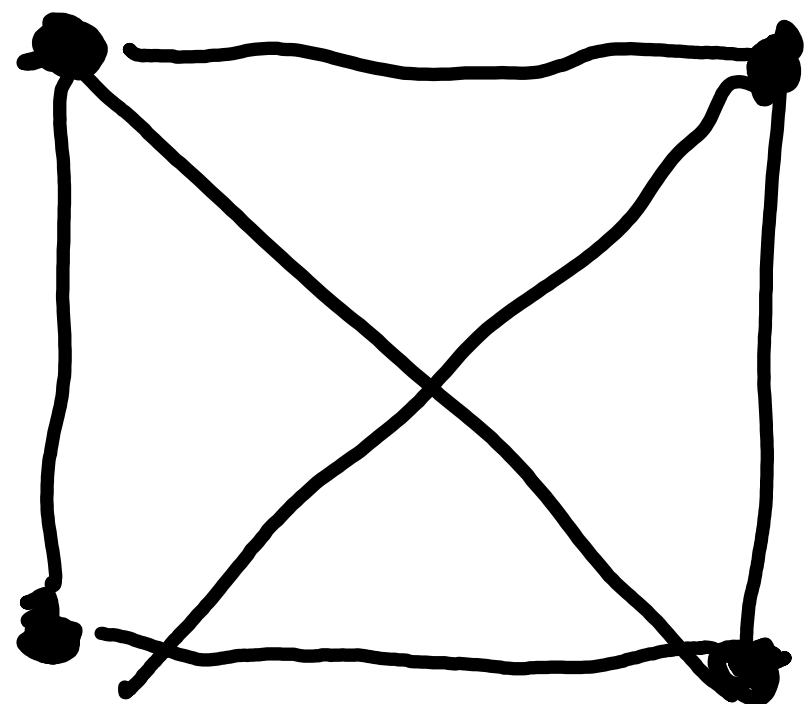
 $\frac{3}{6} \cdot 4000 = 2000$

④  5000  $\frac{4}{10} \cdot 5000 = 3500$

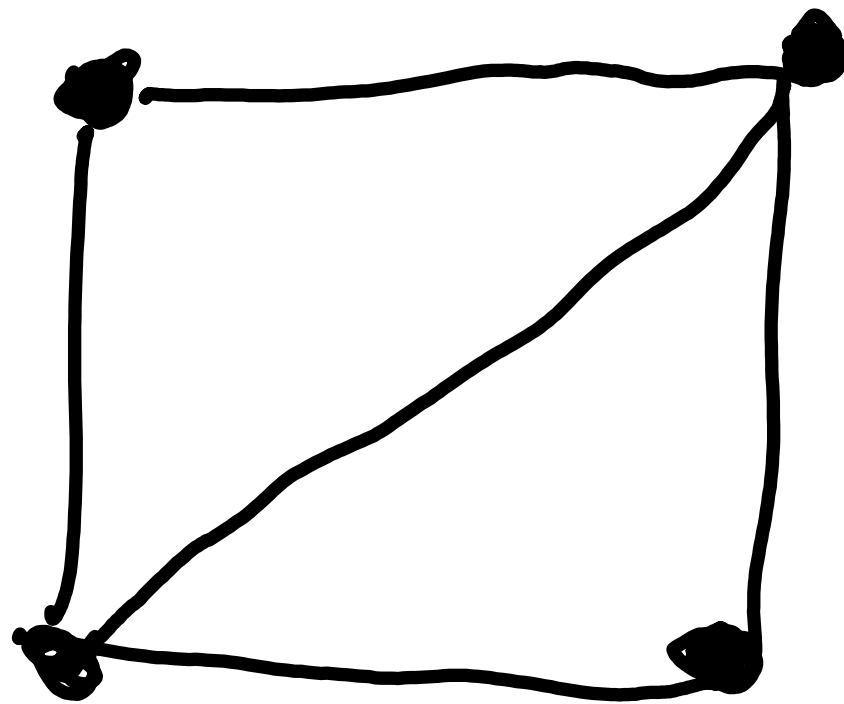
 $\frac{6}{10} \cdot 5000 = 3000$

 $\frac{4}{10} \cdot 5000 = 2000$

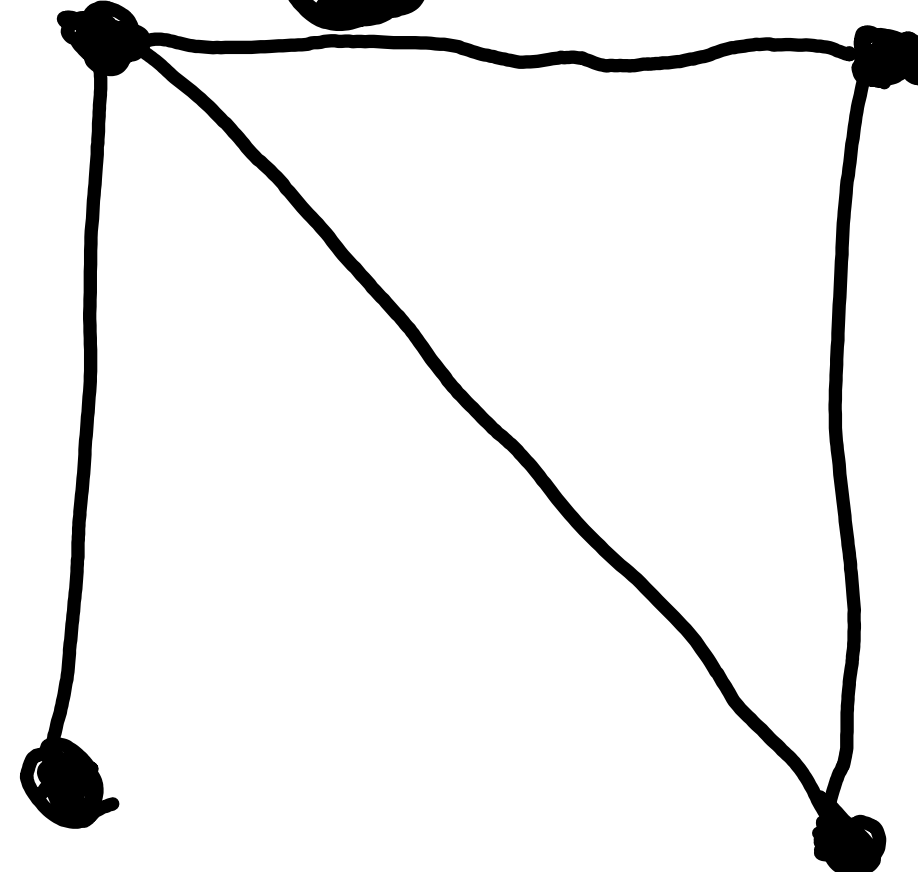
4 - 6



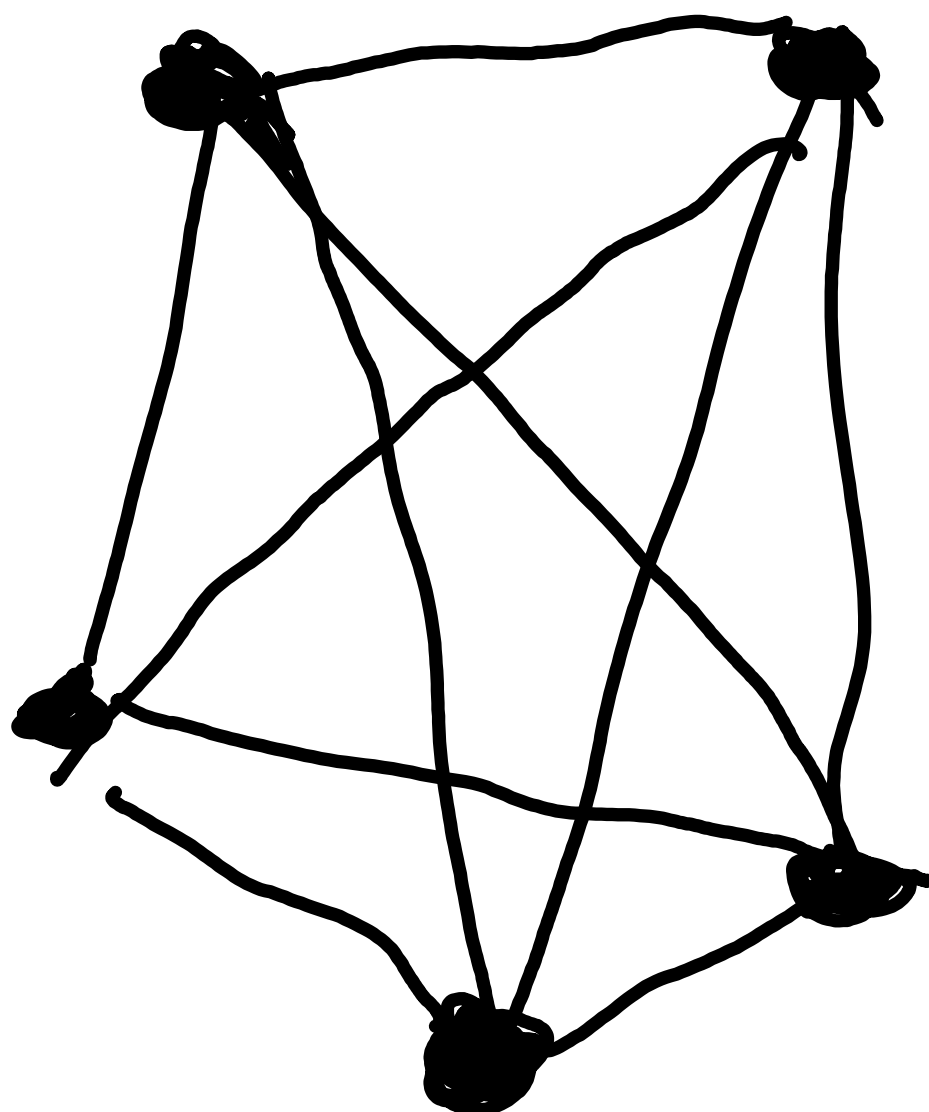
3 - 5



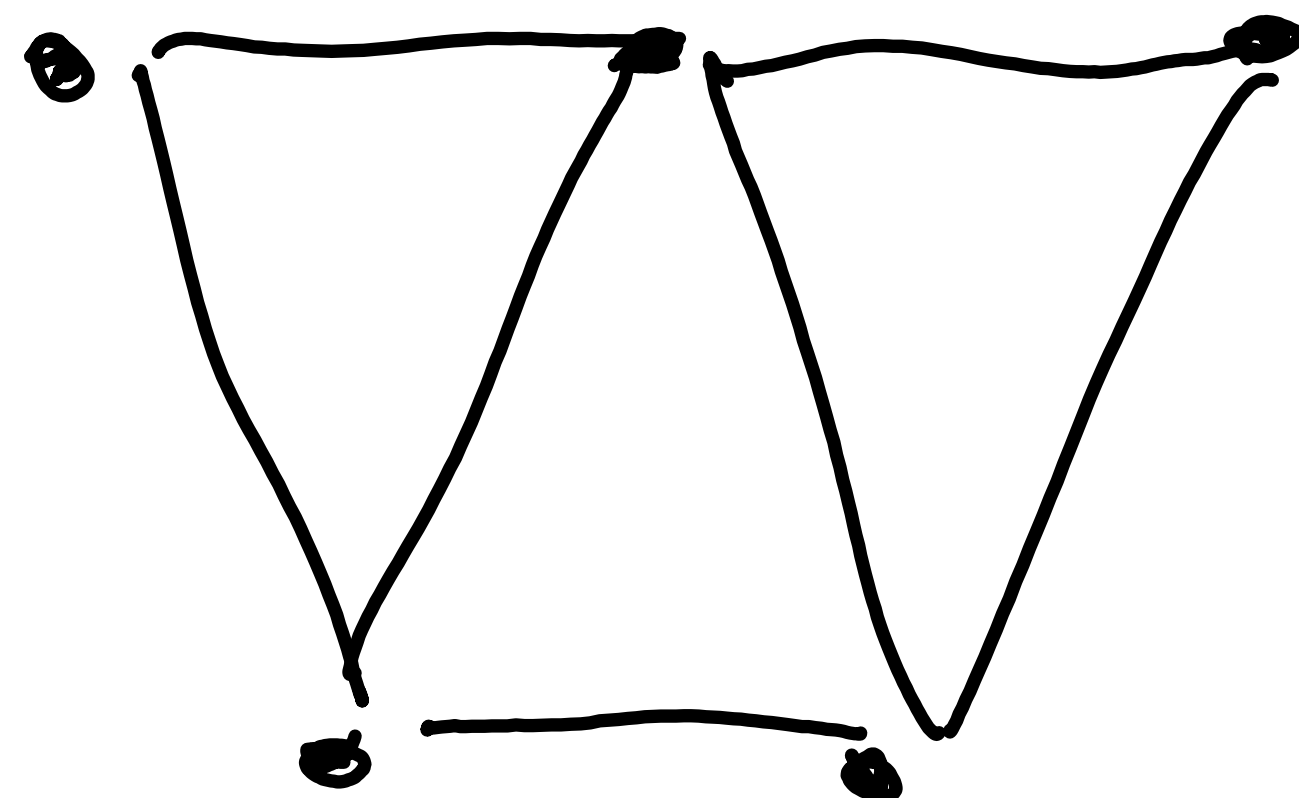
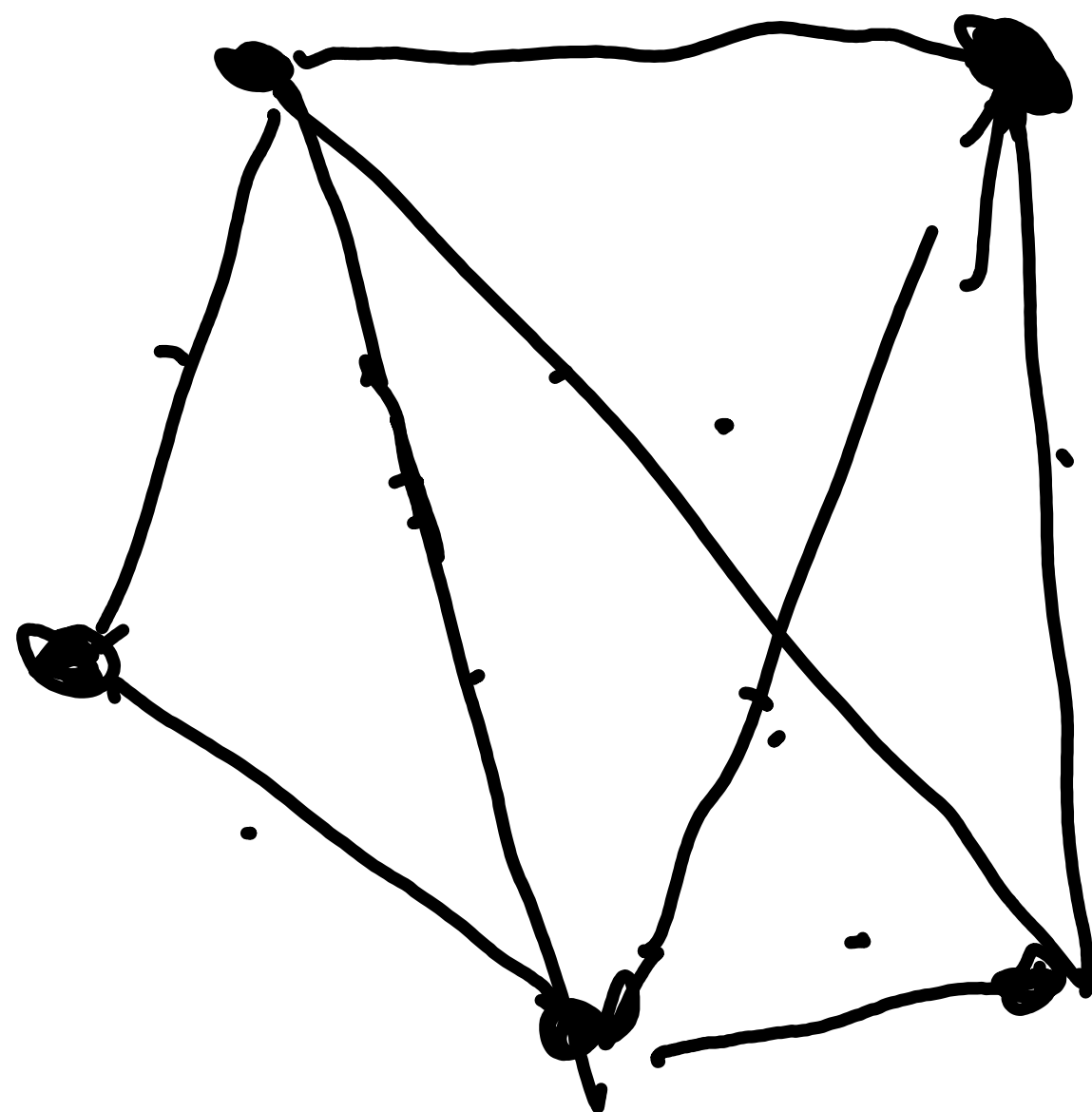
3 - 4



5 - 10

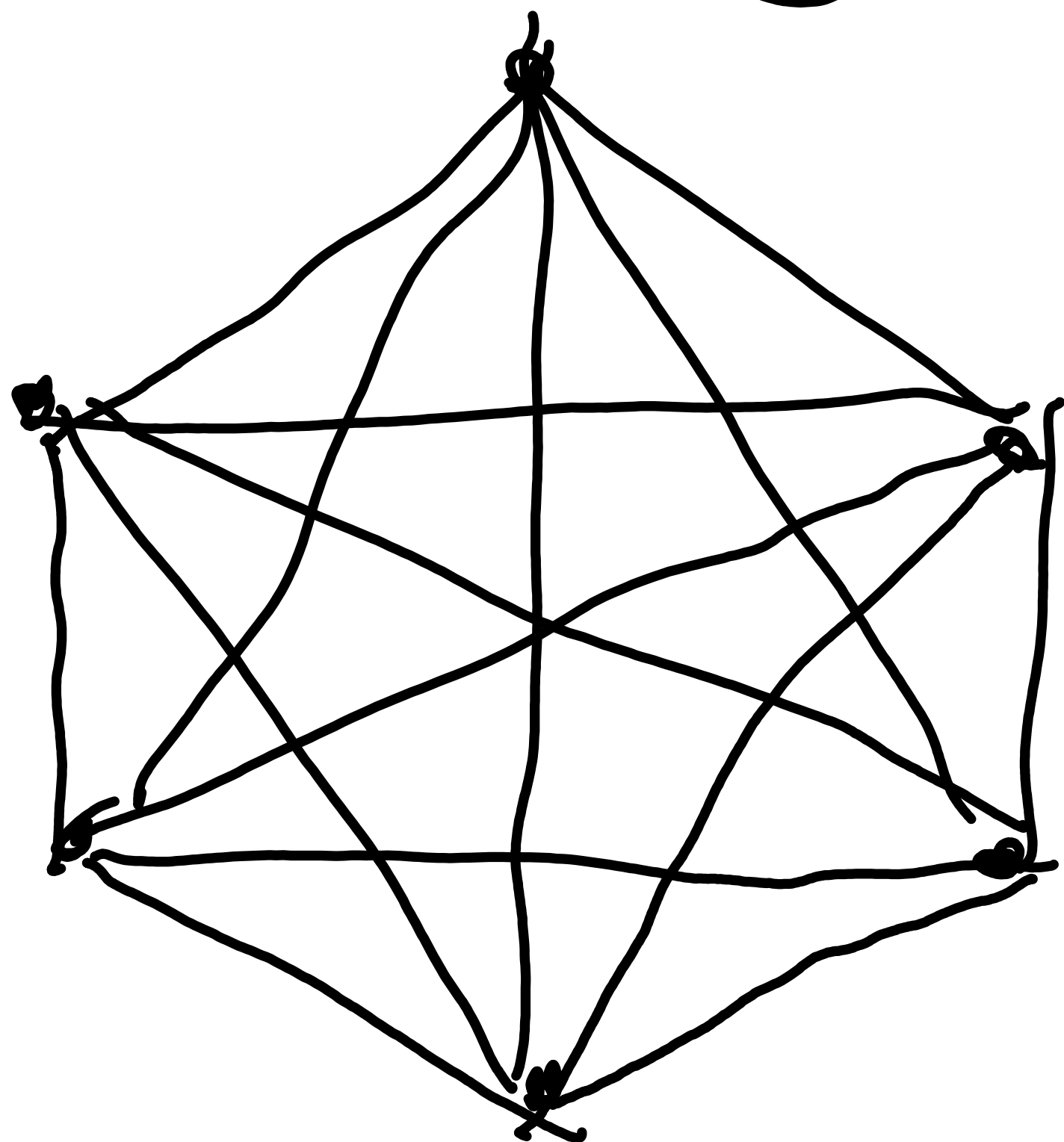


4 - 8

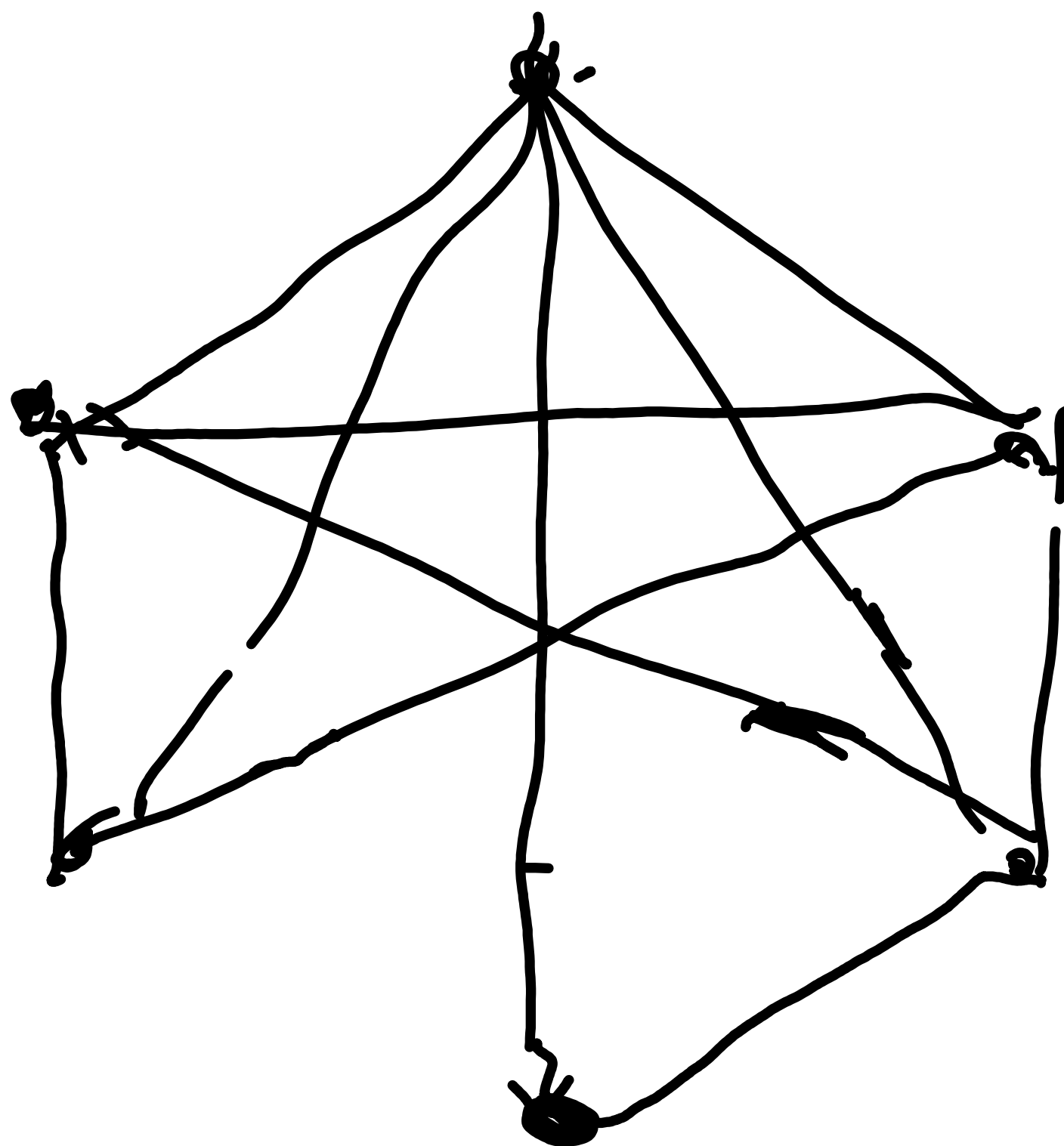


6

6-15



5-13

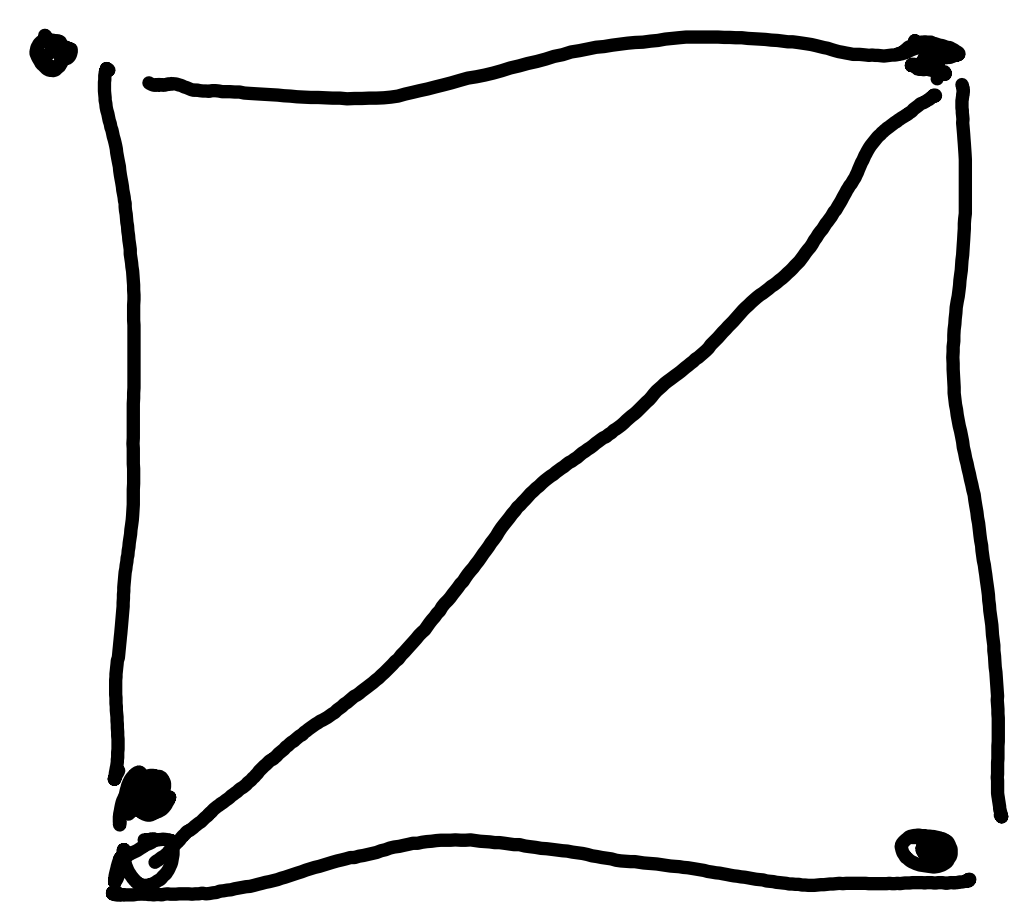
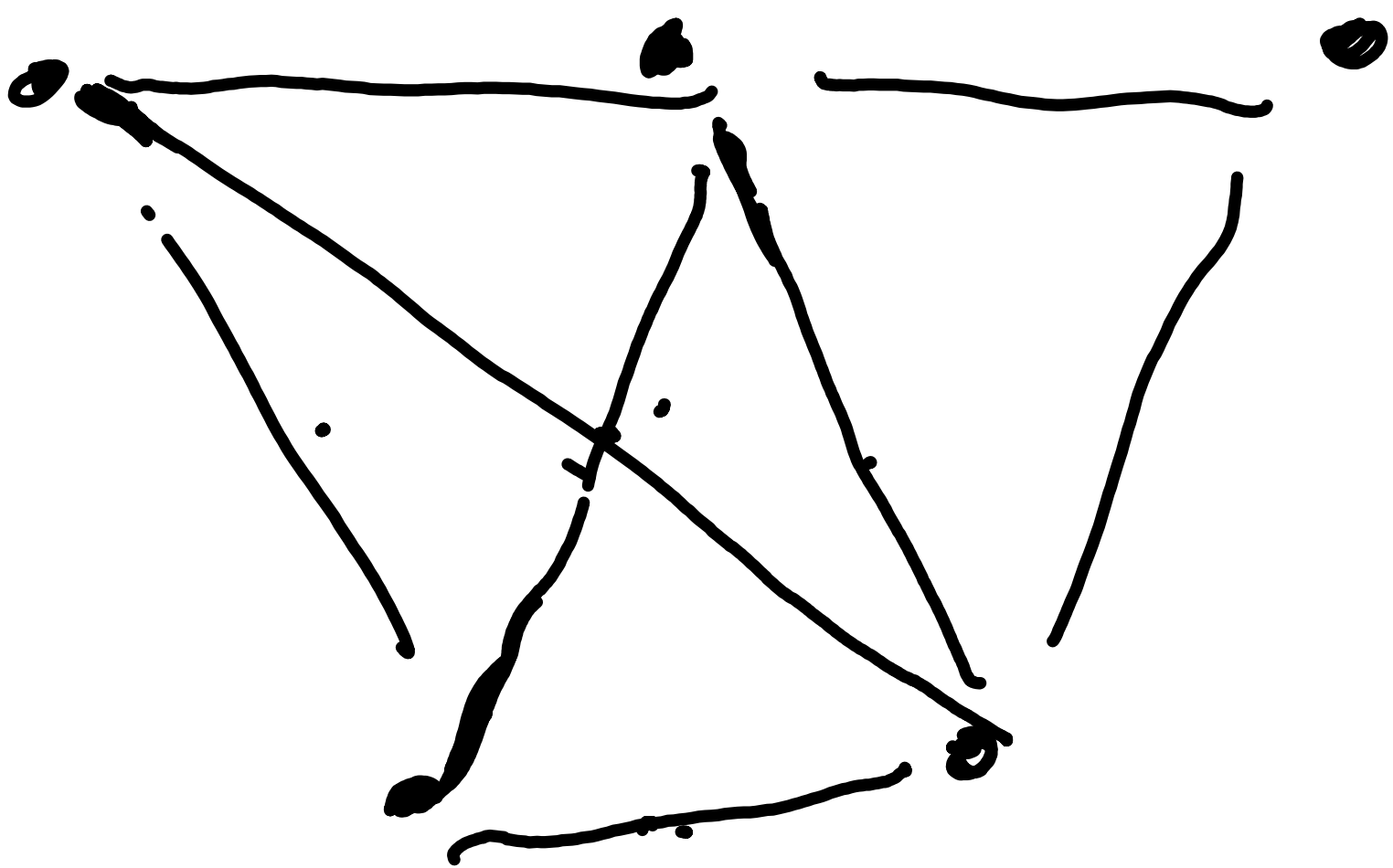


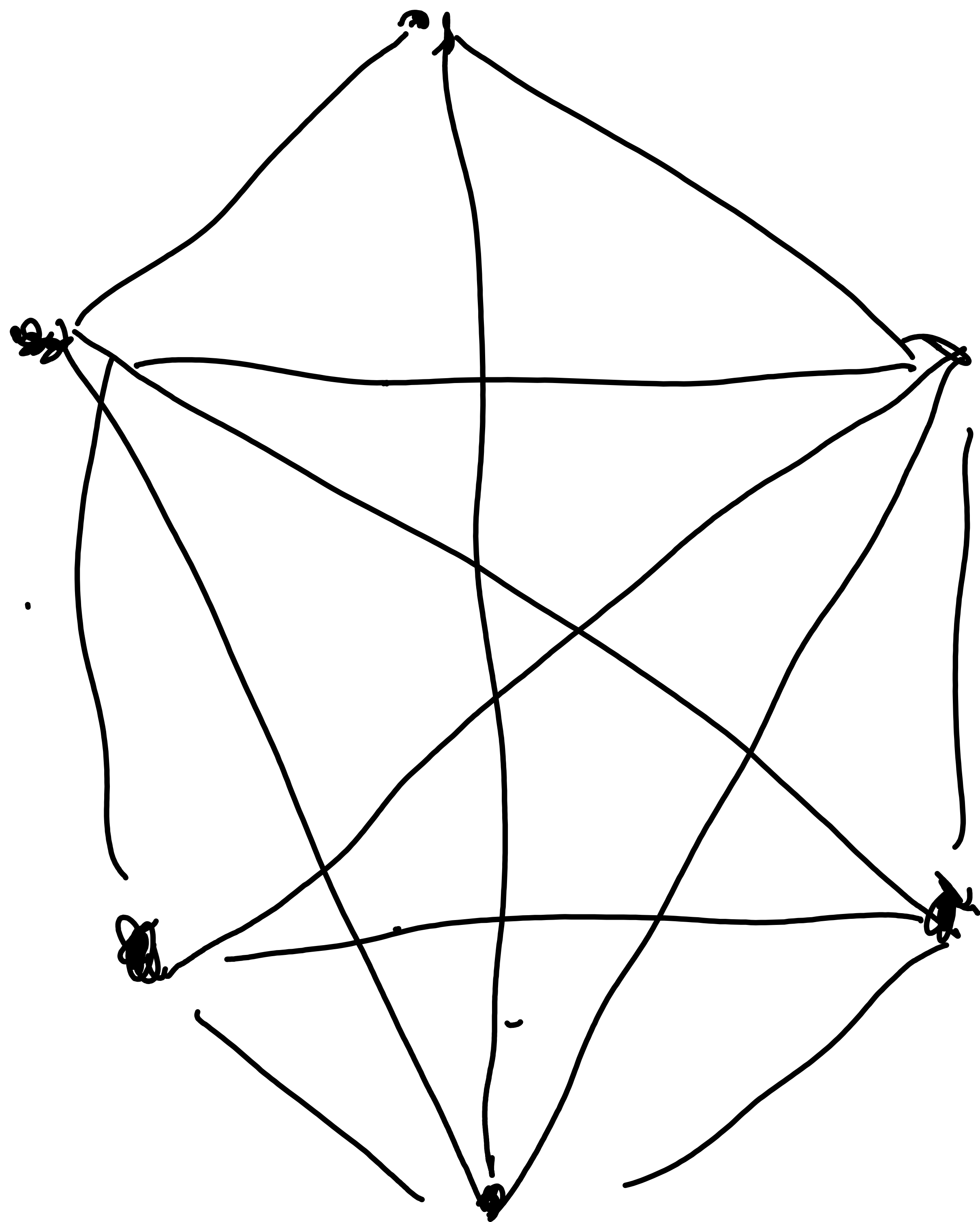
$$k = \frac{n(n-1)}{2}$$

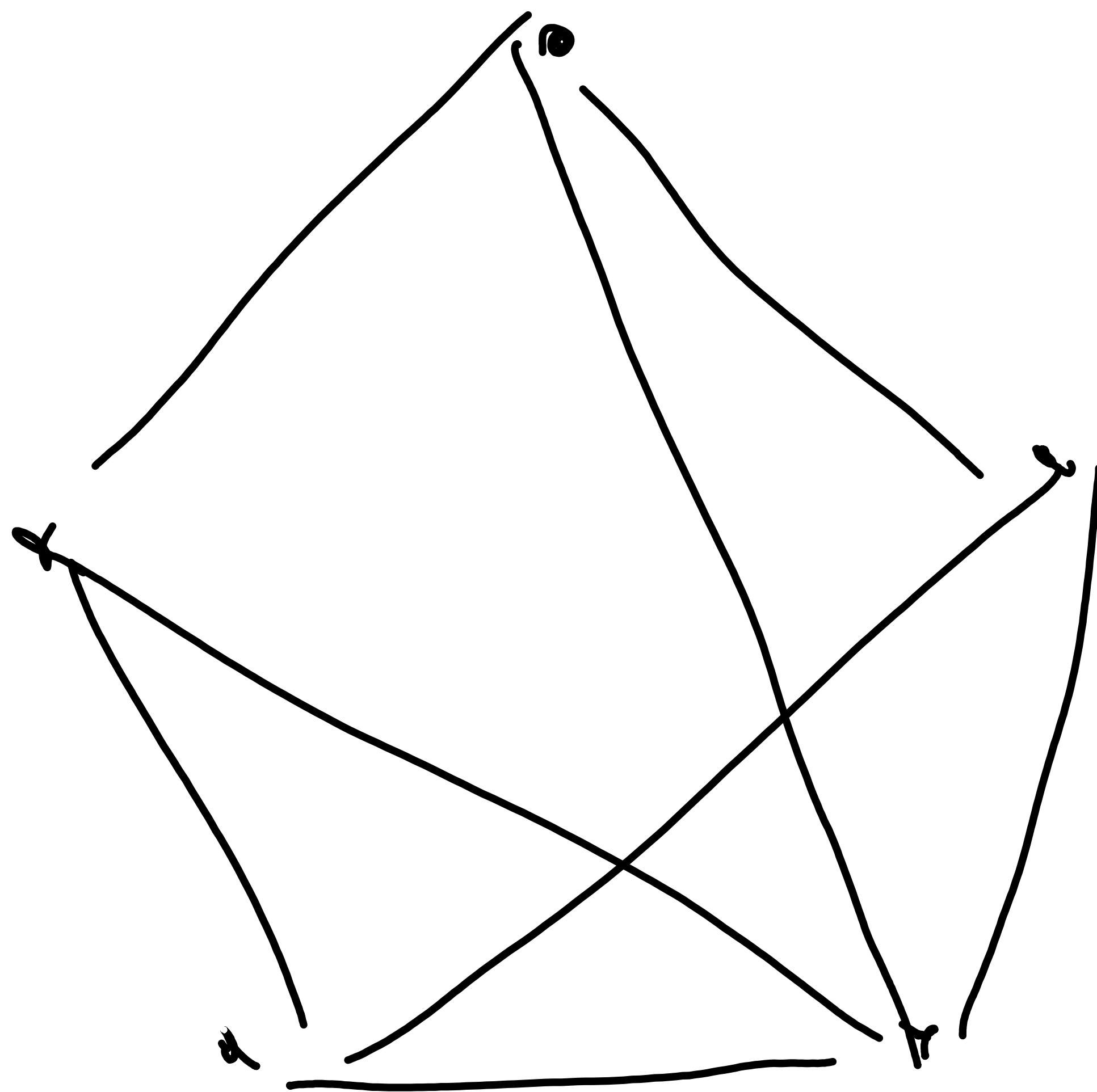
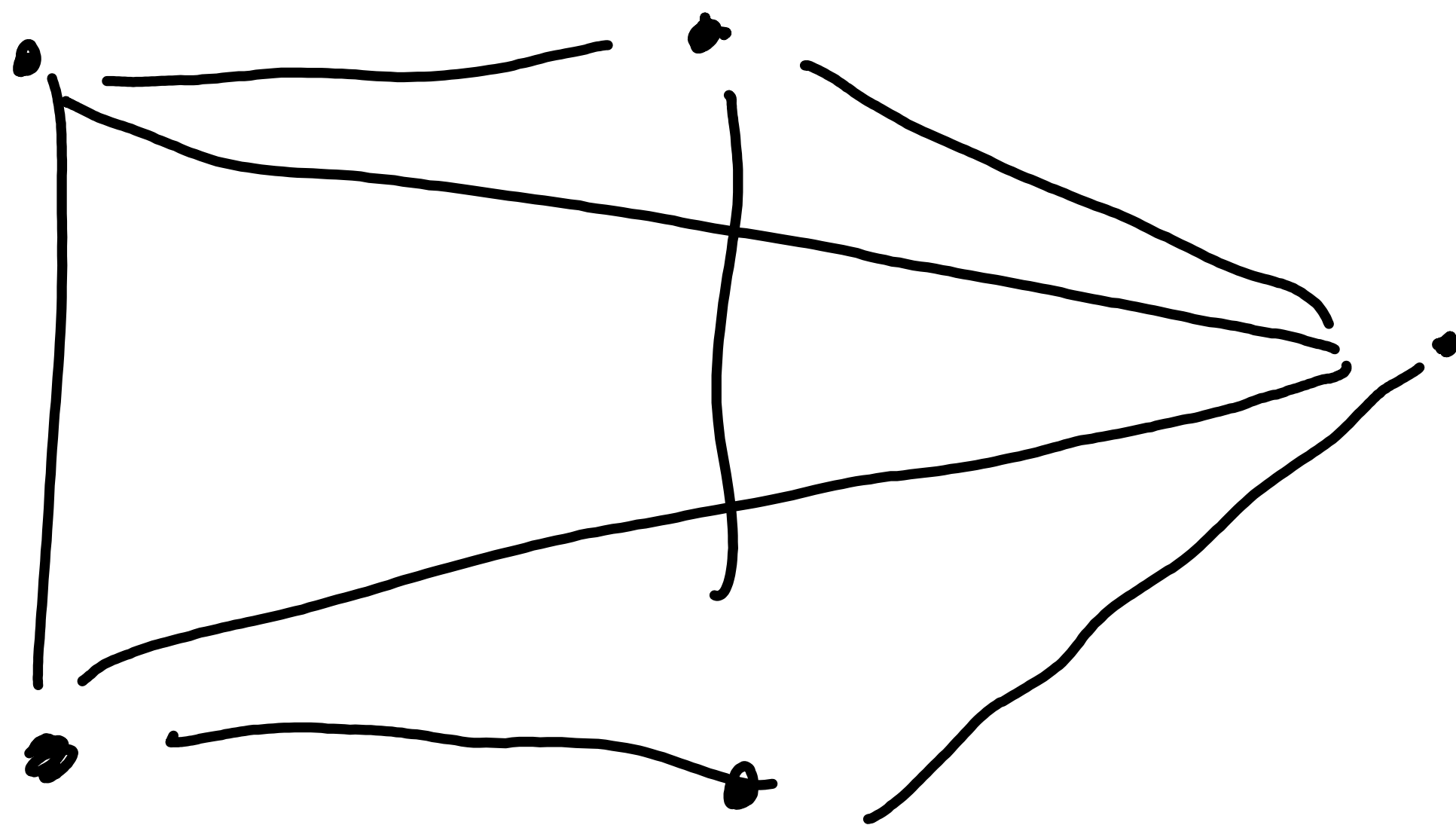
$$2k = n^2 - n$$

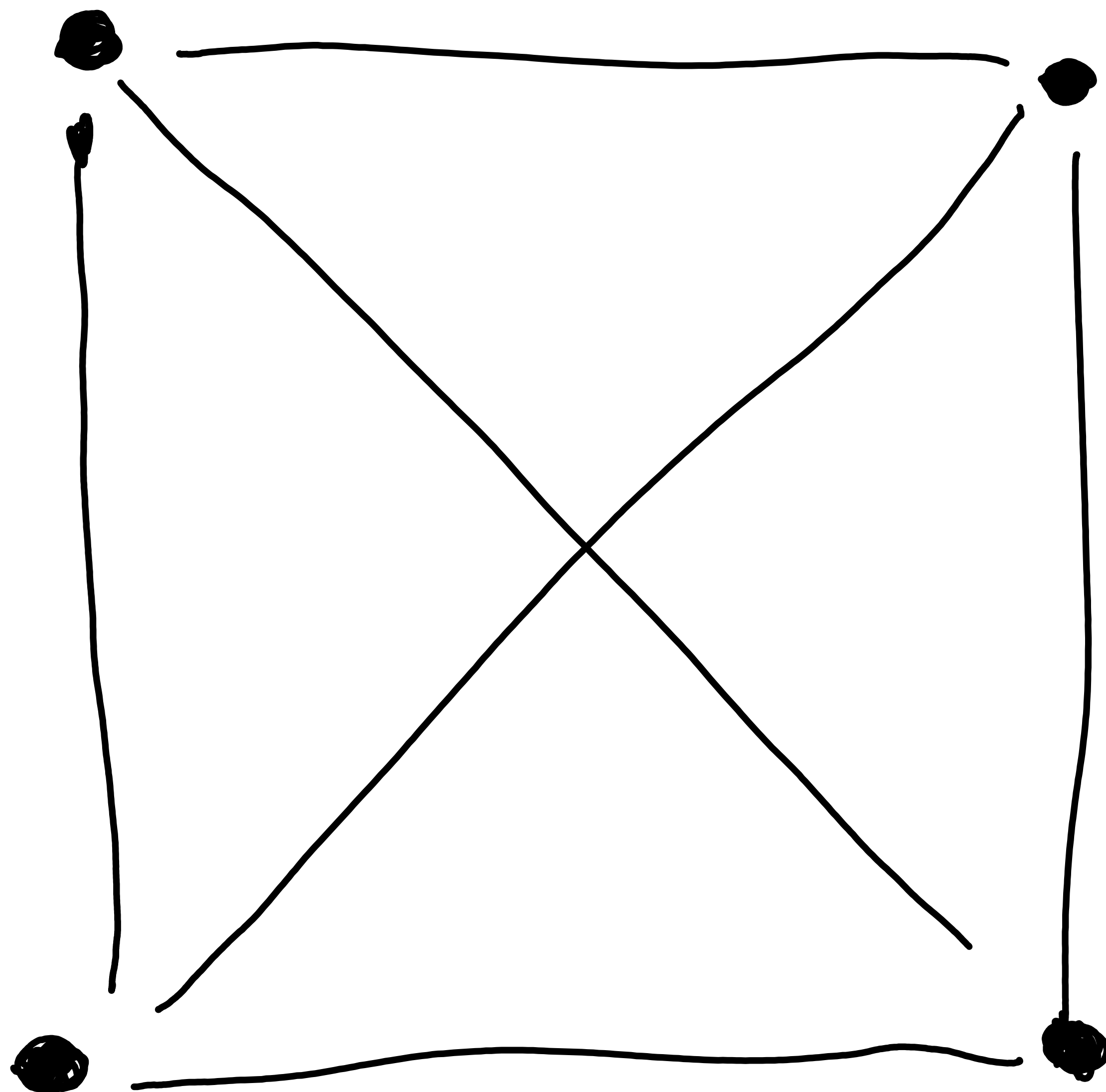
$$0 = n^2 - n - 2k$$

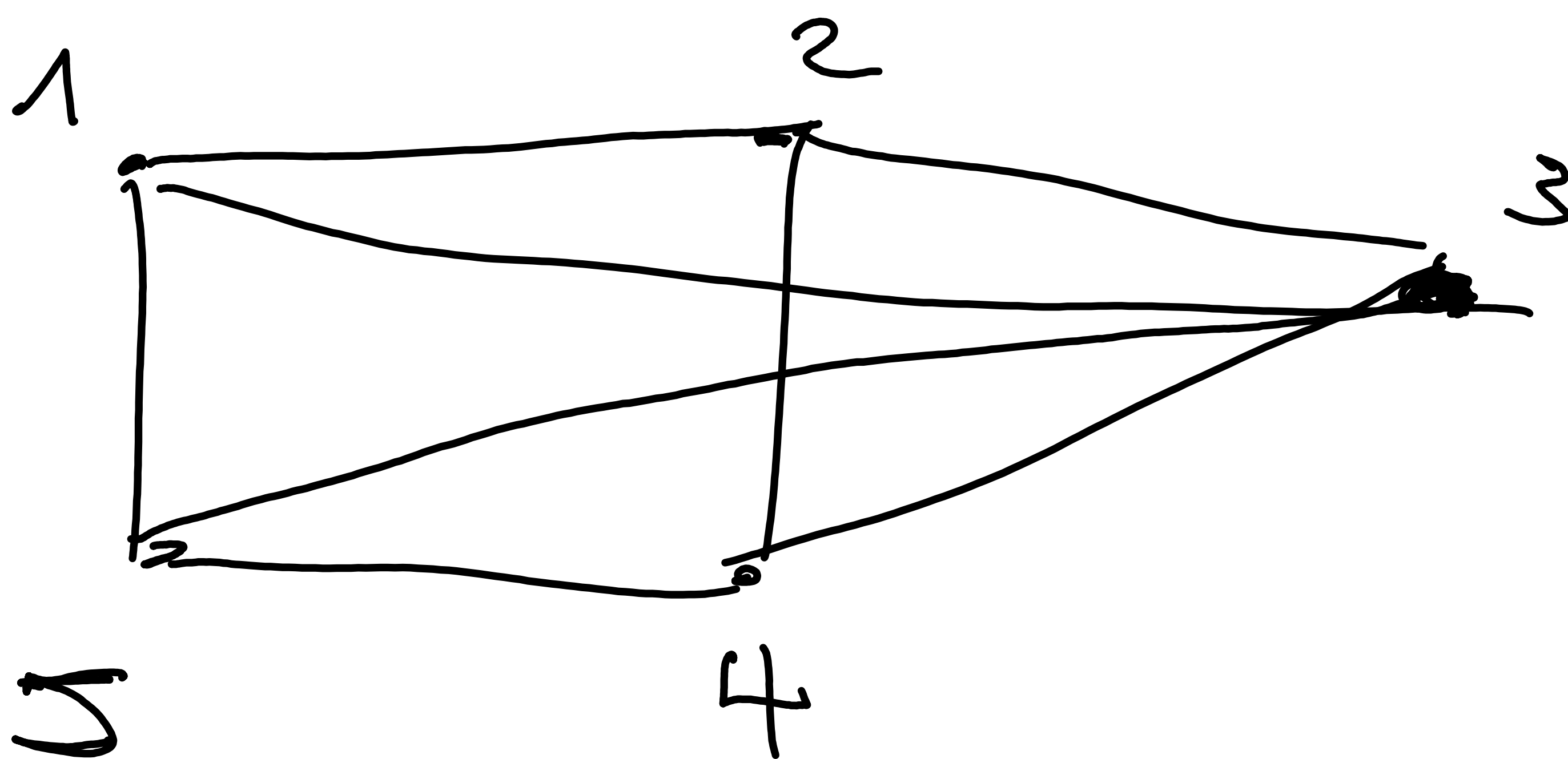
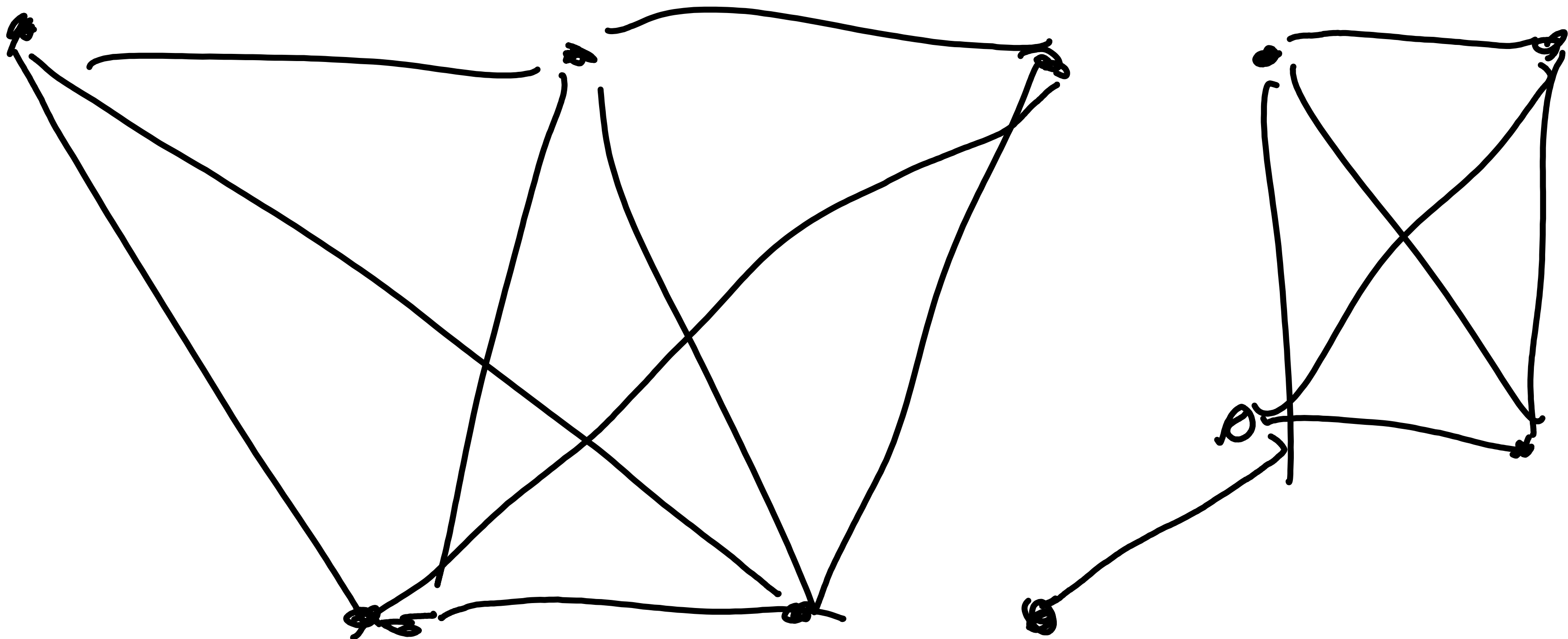
$$\Delta = n^2 + 4n2k \Rightarrow 8nk$$



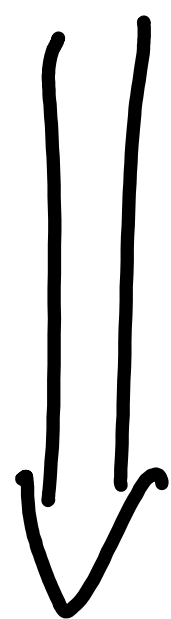








$$(n - (k_e - e)) \cdot 10000 \cdot \frac{e}{k_e}$$



$$\frac{n(n-1)}{2}$$

		:			
		0	1	2	3
.		0	1	1	1
1	0	0	1	1	1
	1	1	0	1	1
				0	1
	2	1	1		
	3	1	1	1	0

$$K = \frac{n(n-1)}{2}$$

0 1 3 4

0 0 1 1 1

1 1 0 1 0

3 1 1 0 0

4 1 0 0 0



0 1 2 3 4

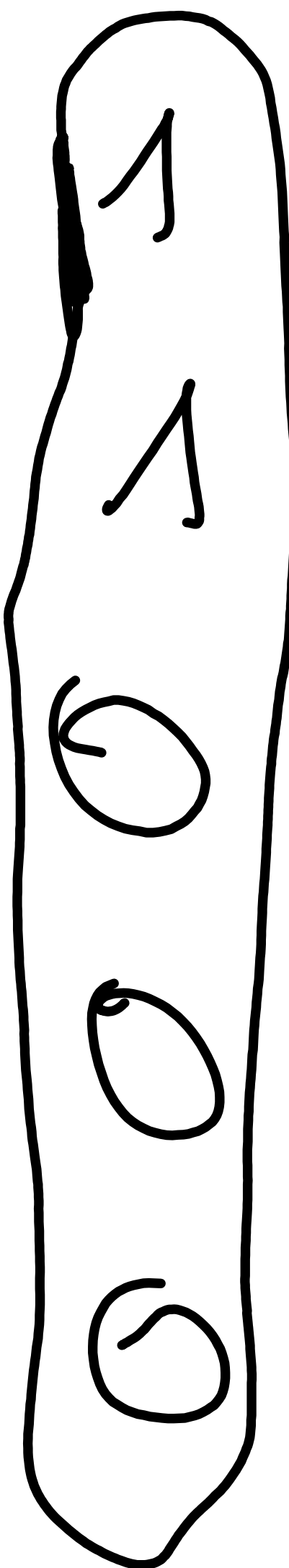
0 0 1 1 1

1 1 0 1 0

2 1 1 0 0

3 1 1 0 1

4 1 0 0 0



→ random hell climb znajduje
proste rozwiązanie optimum - bo
to wszystkie permutacje, tylko w
kolejności losowej

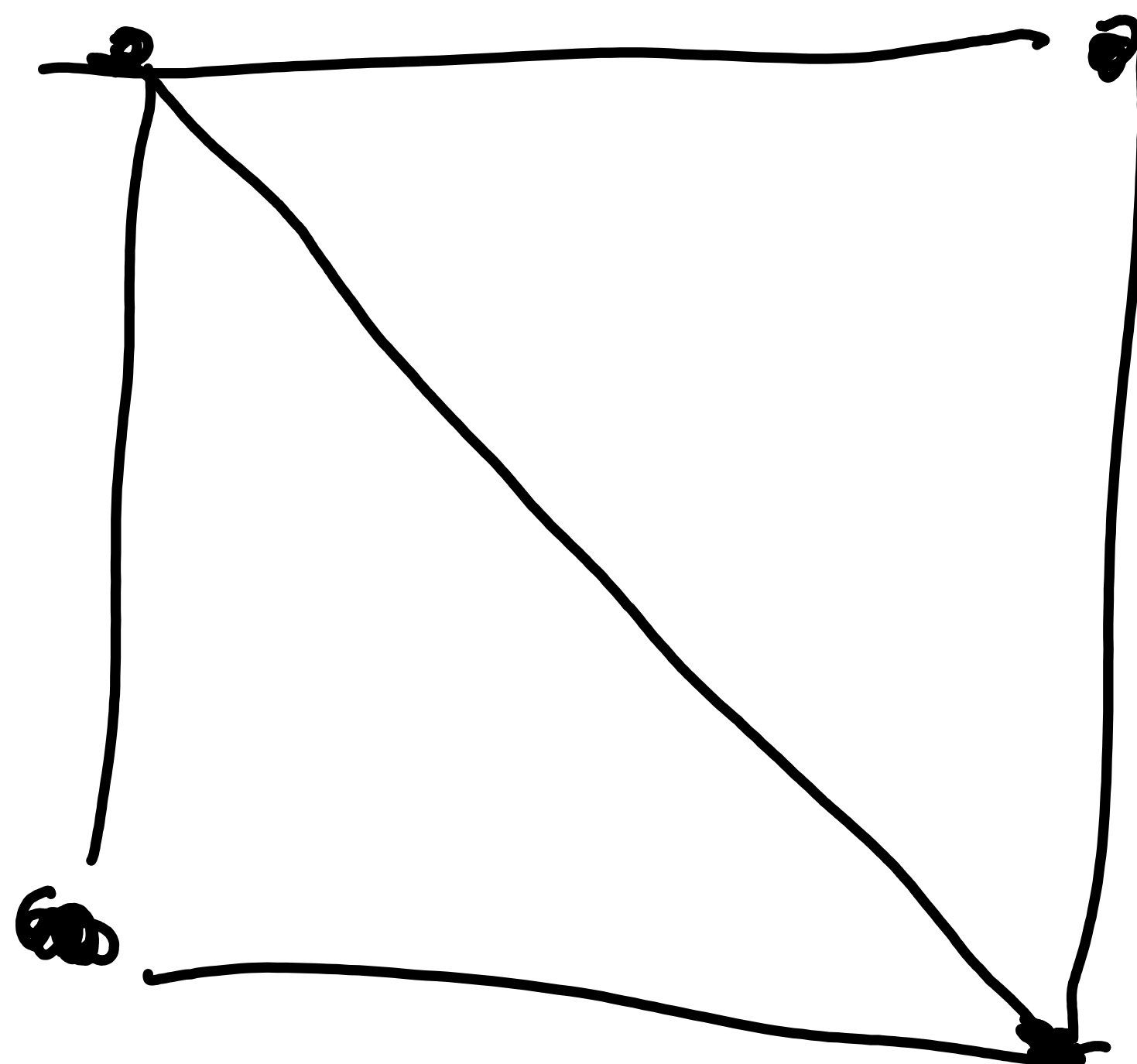
→ funkcja oceny - zsumowa-
nie elementów, tylko 2
1 no 0

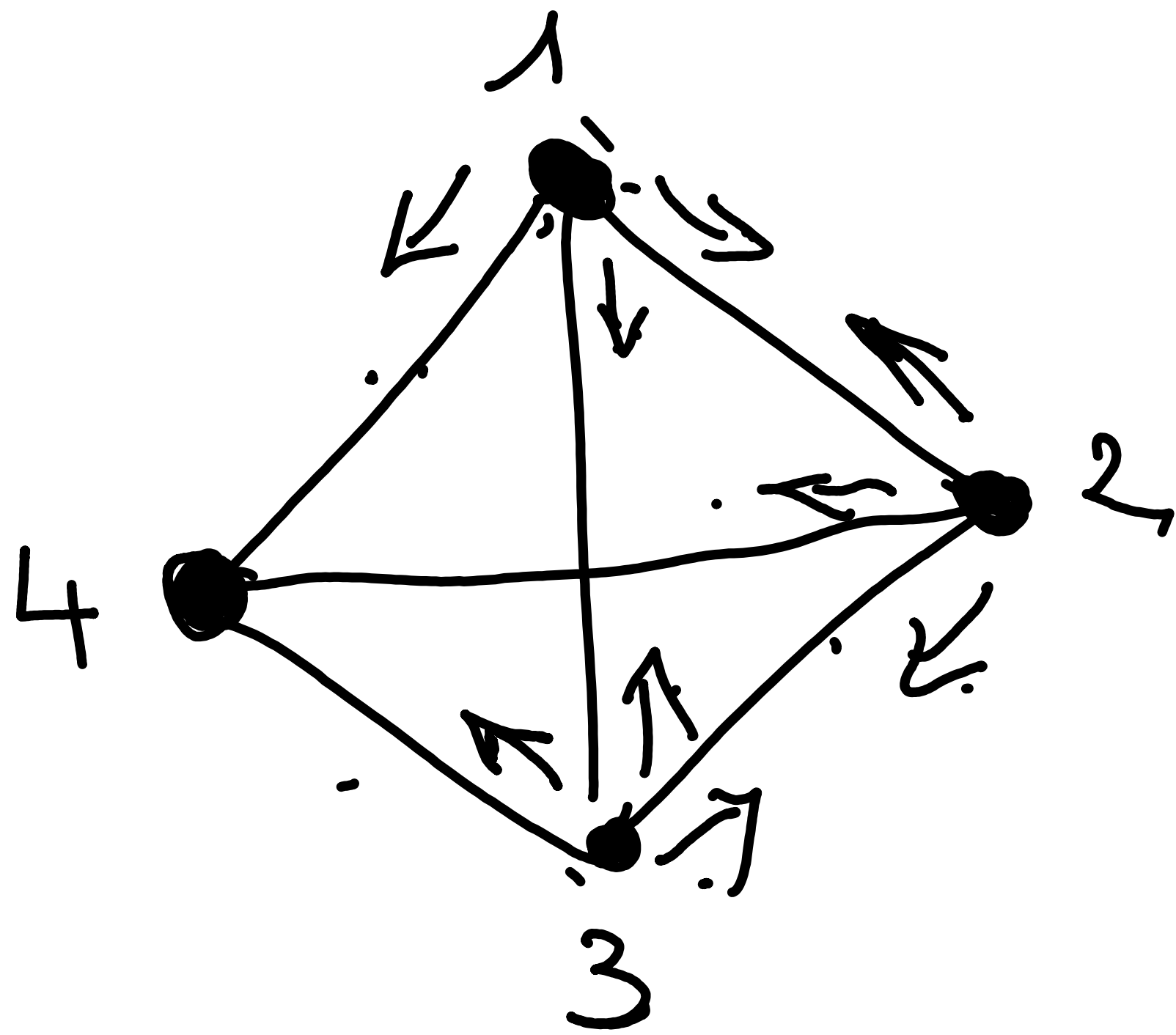
ALBO:

→ zerować losowe rozwiązanie

Zdefiniujmy reprezentację

0 1 0 1 0





1	2	3	2	3	4
1	2	4			
1	3	4			

$$4^3 = 64$$

$$3^2 = 9$$

$$\frac{4!}{3! \cdot (4-3)!} = \frac{24}{6} = 4$$