

length  
avg 3  
reduce to

Get  $\phi$  inequalities

12, 15

splitting

1, 2, 3, 4, 5 into 2 sets  
obs:

cancel the ignore some

1  
2  
3  
4  
5

either 1 or  $\frac{3}{2}$

Singlets

dependence on M



$$M = E(1, 2, 5)$$

$$\Rightarrow 1 \rightarrow \frac{3}{2}$$

vars

$$12$$

~~15~~ (cheaper for now)

$$23$$

$$34$$

$$45$$

$$51$$

Fixations

12  $\leftrightarrow$  21 kill both words guys

Fraction/cuts

$$2 \rightarrow 1$$

$$3 \rightarrow 1$$

$$4 \rightarrow 1$$

$$5 \rightarrow 1$$

Not by length 5

don't need

events / 4 / 5

By total deg.

$$12 \rightarrow 1 \text{ cm} \rightarrow \frac{3}{2}$$

$$23 \rightarrow 1 \text{ cm} \rightarrow 1$$

$$34 \rightarrow$$

$$45 \rightarrow 1 \text{ cm} \rightarrow \frac{3}{2}$$

$$15 \rightarrow 1 \text{ cm} \rightarrow \frac{3}{2}$$

□



$$M = E(2, 5)$$

Singlets

2 sets vars

$$12$$

$$23$$

$$34$$

$$45$$

$$15$$

Cut frac.

$$\frac{1}{2}$$

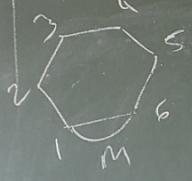
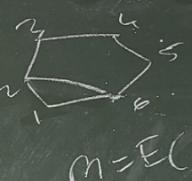
$$\frac{1}{2}$$

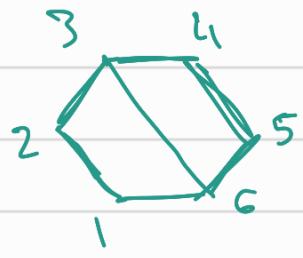
$$1$$

$$\frac{3}{4}$$

$$\frac{3}{2}$$

Vents	cut frac.
1	$\frac{1}{2}$
2	$\frac{1}{2}$
3	Some
4	Some
5	$\frac{3}{2}$

	Singles		cut front		 $M = E(2,6)$	1 sets		CF.							
	1	2	3	4	5	6	$\frac{3}{2}$	1	2	3	4	5	6	$\frac{3}{2}$	
2 sets con		cut front		3 sets con		cut front		2 sets		CF		3 sets		CF	
12		$\frac{3}{2}$		123		$\frac{3}{2}$		12		$\frac{3}{2}$		123		$\frac{3}{2}$	
23		1		234		1		23		$\frac{3}{2}$		234		$\frac{3}{2}$	
34		1		345		1		34		1		345		1	
45		1		456		$\frac{3}{2}$		45		1		456		$\frac{3}{2}$	
56		$\frac{3}{2}$		561		1		56		$\frac{3}{2}$		561		$\frac{3}{2}$	
16		1		612		1		16		$\frac{3}{2}$		612		1	

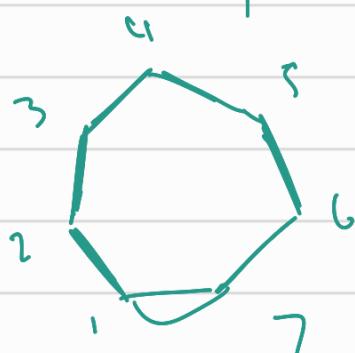


$m: E(3,6)$

1 sets	CF
1	1
2	1
3	$\frac{3}{2}$
4	1
5	1
6	$\frac{3}{2}$

2 sets

	CF	3-sets	CF
12	1		
23	$\frac{3}{2}$	123	$\frac{3}{2}$
34	$\frac{3}{2}$	234	$\frac{3}{2}$
45	1	345	$\frac{3}{2}$
56	$\frac{3}{2}$	456	$\frac{3}{2}$
16	$\frac{3}{2}$	561	$\frac{3}{2}$
		612	$\frac{3}{2}$

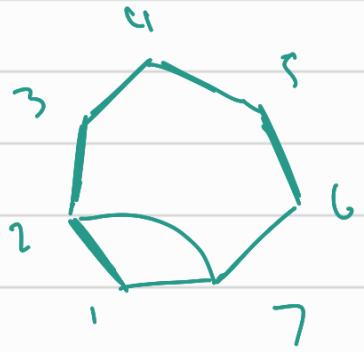


$M: E(1,7)$

1 sets	CF
1	$\frac{7}{2}$
2	1
3	1
4	1
5	1
6	1
7	$\frac{3}{2}$

2 sets

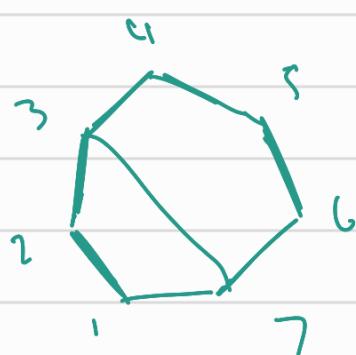
	CF	3-sets	CF
12	$\frac{3}{2}$		
23	1	123	$\frac{3}{2}$
34	1	234	1
45	1	345	1
56	1	456	1
67	1	567	$\frac{3}{2}$
71	$\frac{3}{2}$	671	1
	1	712	1



$$m = (2, 7)$$

<u>1 sets</u>	<u>CF</u>
1	1
2	$\frac{3}{2}$
3	1
4	1
5	1
6	1
7	$\frac{3}{2}$

<u>2 sets</u>	<u>CF</u>	<u>3-sets</u>	<u>CF</u>
12	$\frac{3}{2}$	123	$\frac{3}{2}$
23	$\frac{3}{2}$	234	$\frac{3}{2}$
34	1	345	1
45	1	456	1
56	1	567	$\frac{3}{2}$
67	$\frac{3}{2}$	671	$\frac{3}{2}$
71	$\frac{3}{2}$	712	1



$$m = (3, 7)$$

<u>1 sets</u>	<u>CF</u>
1	1
2	1
3	$\frac{3}{2}$
4	1
5	1
6	1
7	$\frac{3}{2}$

<u>2 sets</u>	<u>CF</u>	<u>3-sets</u>	<u>CF</u>
12	1	123	$\frac{3}{2}$
23	$\frac{3}{2}$	234	$\frac{3}{2}$
34	$\frac{3}{2}$	345	$\frac{3}{2}$
45	1	456	1
56	1	567	$\frac{3}{2}$
67	$\frac{3}{2}$	671	$\frac{3}{2}$
71	$\frac{3}{2}$	712	$\frac{3}{2}$

# CMSA $g=2$ ?

		Isots	CF	
		1	$\frac{1}{2}$	
		2	$\frac{1}{2}$	
		3	1	
		4	$\frac{1}{2}$	
		5	1	
		6	$\frac{1}{2}$	
		7	1	
		8	$\frac{1}{2}$	
		9	1	
		10	$\frac{1}{2}$	
		11	1	
		12	$\frac{1}{2}$	
		13	1	
		14	$\frac{1}{2}$	
		15	1	
		16	$\frac{1}{2}$	
2		3 Isots	CF	
		123	$\frac{1}{2}$	
		234	$\frac{1}{2}$	
		345	1	
		456	$\frac{1}{2}$	
		561	$\frac{1}{2}$	
		612	1	
		789	1	
		8910	$\frac{1}{2}$	
		91011	1	
		101112	$\frac{1}{2}$	
		111213	1	
		121314	$\frac{1}{2}$	
		131415	1	
		141516	$\frac{1}{2}$	
		15161	1	
		16112	$\frac{1}{2}$	
		11223	1	
		12234	$\frac{1}{2}$	
		13245	1	
		14256	$\frac{1}{2}$	
		15261	1	
		16212	$\frac{1}{2}$	
		112233	1	
		122334	$\frac{1}{2}$	
		132445	1	
		142556	$\frac{1}{2}$	
		152661	1	
		162112	$\frac{1}{2}$	
		1122334	1	
		1223345	$\frac{1}{2}$	
		1324456	1	
		1425561	$\frac{1}{2}$	
		1526612	1	
		1621123	$\frac{1}{2}$	
		11223345	1	
		12233456	$\frac{1}{2}$	
		13244561	1	
		14255612	$\frac{1}{2}$	
		15266123	1	
		16211234	$\frac{1}{2}$	
		112233456	1	
		122334561	$\frac{1}{2}$	
		132445612	1	
		142556123	$\frac{1}{2}$	
		152661234	1	
		162112345	$\frac{1}{2}$	
		1122334561	1	
		1223345612	$\frac{1}{2}$	
		1324456123	1	
		1425561234	$\frac{1}{2}$	
		1526612345	1	
		1621123456	$\frac{1}{2}$	
		11223345612	1	
		12233456123	$\frac{1}{2}$	
		13244561234	1	
		14255612345	$\frac{1}{2}$	
		15266123456	1	
		16211234561	$\frac{1}{2}$	
		112233456123	1	
		122334561234	$\frac{1}{2}$	
		132445612345	1	
		142556123456	$\frac{1}{2}$	
		152661234561	1	
		162112345612	$\frac{1}{2}$	
		1122334561234	1	
		1223345612345	$\frac{1}{2}$	
		1324456123456	1	
		1425561234561	$\frac{1}{2}$	
		1526612345612	1	
		1621123456123	$\frac{1}{2}$	
		11223345612345	1	
		12233456123456	$\frac{1}{2}$	
		13244561234561	1	
		14255612345612	$\frac{1}{2}$	
		15266123456123	1	
		16211234561234	$\frac{1}{2}$	
		112233456123456	1	
		122334561234561	$\frac{1}{2}$	
		132445612345612	1	
		142556123456123	$\frac{1}{2}$	
		152661234561234	1	
		162112345612345	$\frac{1}{2}$	
		1122334561234561	1	
		1223345612345612	$\frac{1}{2}$	
		1324456123456123	1	
		1425561234561234	$\frac{1}{2}$	
		1526612345612345	1	
		1621123456123456	$\frac{1}{2}$	
		11223345612345612	1	
		12233456123456123	$\frac{1}{2}$	
		13244561234561234	1	
		14255612345612345	$\frac{1}{2}$	
		15266123456123456	1	
		16211234561234561	$\frac{1}{2}$	
		112233456123456123	1	
		122334561234561234	$\frac{1}{2}$	
		132445612345612345	1	
		142556123456123456	$\frac{1}{2}$	
		152661234561234561	1	
		162112345612345612	$\frac{1}{2}$	
		1122334561234561234	1	
		1223345612345612345	$\frac{1}{2}$	
		1324456123456123456	1	
		1425561234561234561	$\frac{1}{2}$	
		1526612345612345612	1	
		1621123456123456123	$\frac{1}{2}$	
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		12233456123456123456	$\frac{1}{2}$	
		13244561234561234561	1	
		14255612345612345612	$\frac{1}{2}$	
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		16211234561234561234	$\frac{1}{2}$	
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		122334561234561234561	$\frac{1}{2}$	
		132445612345612345612	1	
		142556123456123456123	$\frac{1}{2}$	
		152661234561234561234	1	
		162112345612345612345	$\frac{1}{2}$	
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		1223345612345612345612	$\frac{1}{2}$	
		1324456123456123456123	1	
		1425561234561234561234	$\frac{1}{2}$	
		1526612345612345612345	1	
		1621123456123456123456	$\frac{1}{2}$	
		11223345612345612345612	1	
		12233456123456123456123	$\frac{1}{2}$	
		13244561234561234561234	1	
		14255612345612345612345	$\frac{1}{2}$	
		15266123456123456123456	1	
		16211234561234561234561	$\frac{1}{2}$	
		112233456123456123456123	1	
		122334561234561234561234	$\frac{1}{2}$	
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		142556123456123456123456	$\frac{1}{2}$	
		152661234561234561234561	1	
		162112345612345612345612	$\frac{1}{2}$	
		1122334561234561234561234	1	
		1223345612345612345612345	$\frac{1}{2}$	
		1324456123456123456123456	1	
		1425561234561234561234561	$\frac{1}{2}$	
		1526612345612345612345612	1	
		1621123456123456123456123	$\frac{1}{2}$	
		11223345612345612345612345	1	
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		13244561234561234561234561	1	
		14255612345612345612345612	$\frac{1}{2}$	
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		16211234561234561234561234	$\frac{1}{2}$	
		112233456123456123456123456	1	
		122334561234561234561234561	$\frac{1}{2}$	
		132445612345612345612345612	1	
		142556123456123456123456123	$\frac{1}{2}$	
		152661234561234561234561234	1	
		162112345612345612345612345	$\frac{1}{2}$	
		1122334561234561234561234561	1	
		1223345612345612345612345612	$\frac{1}{2}$	
		1324456123456123456123456123	1	
		1425561234561234561234561234	$\frac{1}{2}$	
		1526612345612345612345612345	1	
		1621123456123456123456123456	$\frac{1}{2}$	
		11223345612345612345612345612	1	
		12233456123456123456123456123	$\frac{1}{2}$	
		13244561234561234561234561234	1	
		14255612345612345612345612345	$\frac{1}{2}$	
		15266123456123456123456123456	1	
		16211234561234561234561234561	$\frac{1}{2}$	
		112233456123456123456123456123	1	
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		112233456123456123456123456123456123	1	
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		1		

