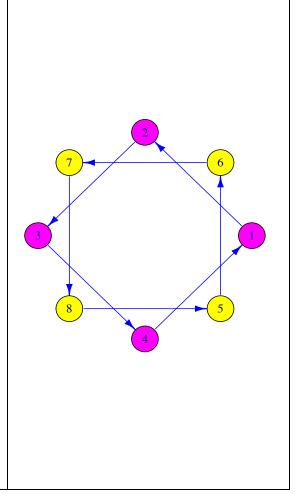
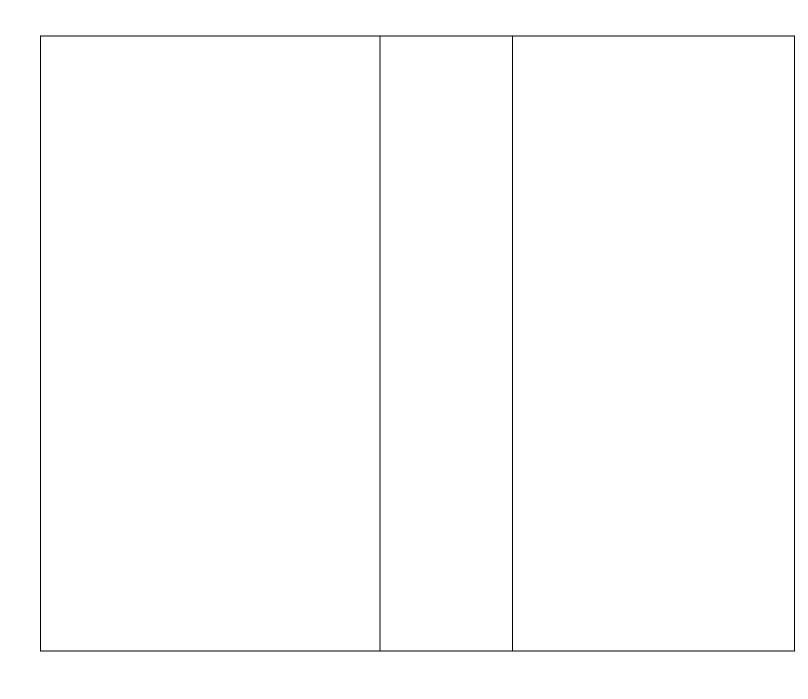
beat A B C D 1 13 1 9 5 2 13 2 10 6 3 13 3 11 7 4 13 4 12 8 5 13 5 1 9 6 13 6 2 10 7 13 7 3 11 8 13 8 4 12 9 13 9 5 1 10 13 10 6 2 11 13 11 7 3 11 C A 6 D A 9 D A 10 B A 11 C A 12 D A	posito	ns						pas	sses		
1 13 1 9 5 2 13 2 10 6 3 13 3 11 7 4 13 4 12 8 5 13 5 1 9 6 13 6 2 10 7 13 7 3 11 8 13 8 4 12 9 13 9 5 1 10 13 10 6 2 11 13 11 7 12 13 12 8 4	beat	Α	В	С	D			Α	В	С	D
2 13 2 10 6 3 13 3 11 7 4 13 4 12 8 5 13 5 1 9 6 13 6 2 10 7 13 7 3 11 8 13 8 4 12 9 13 9 5 1 10 13 10 6 2 11 13 11 7 3 12 13 12 8 4	1						1				
4 13 4 12 8 5 13 5 1 9 6 13 6 2 10 7 13 7 3 11 8 13 8 4 12 9 13 9 5 1 10 13 10 6 2 11 13 11 7 3 12 13 12 8 4				10						Α	
5 13 5 1 9 6 13 6 2 10 7 13 7 3 11 8 13 8 4 12 9 13 9 5 1 9 D A 10 13 10 6 2 11 13 11 7 3 11 C A 12 13 12 8 4 9 12 D A	3	13	3								Α
5 13 5 1 9 6 13 6 2 10 7 13 7 3 11 8 13 8 4 12 9 13 9 5 1 9 D A 10 13 10 6 2 11 13 11 7 3 12 13 12 8 4	4	13	4	12	8		4	В	Α		
6 13 6 2 10 7 13 7 3 11 8 13 8 4 12 9 13 9 5 1 10 13 10 6 2 11 13 11 7 3 12 13 12 8 4 1 9 0 0 A 9 D A 10 B A 11 C A 12 D A	5	13	5	1	9		5	С		Α	
7 13 7 3 11 8 13 8 4 12 9 13 9 5 1 10 13 10 6 2 11 13 11 7 3 12 13 12 8 4 12 9 D A 10 B A 11 C A 12 D A	6	13	6	2	10						Α
8 13 8 4 12 9 13 9 5 1 10 13 10 6 2 11 13 11 7 3 12 13 12 8 4 12 9 D A 10 B A 11 C A 12 D A	7	13	7	3	11				Α		
10 13 10 6 2 11 13 11 7 3 12 13 12 8 4 1 12 D A	8	13	8	4	12					Α	
11 13 11 7 3 11 C A 12 13 12 8 4 9 8 4 7 7	9	13	9	5	1		9	D			Α
12 13 12 8 4 12 D A	10	13	10	6	2		10	В	Α		
12 13 12 8 4 12 D A	11	13	11	7	3		11	С		Α	
2 3 9 8	12	13	12	8	4		12	D			Α
		2		3)	9) —		8		
					4/10)		6		7

Pattern: Windy 2-holer

POSITIONS								
	Α	В	С	D	E	F		
1	7	6	5	3	1-2	4		
2	7-8	6	5	3	2	4		
3	8	6	5	3	2	4-1		
4	8	6-7	5	3	2	1		
5	8	7	5	3-4	2	1		
6	8	7	5-6	4	2	1		
7	8	7	6	4	2-3	1		
8	8-5	7	6	4	3	1		
9	5	7	6	4	3	1-2		
10	5	7-8	6	4	3	2		
11	5	8	6	4-1	3	2		
12	5	8	6-7	1	3	2		
13	5	8	7	1	3-4	2		
14	5-6	8	7	1	4	2		
15	6	8	7	1	4	2-3		
16	6	8-5	7	1	4	3		
17	6	5	7	1-2	4	3		
18	6	5	7-8	2	4	3		
19	6	5	8	2	4-1	3		
20	6-7	5	8	2	1	3		
21	7	5	8	2	1	3-4		
22	7	5-6	8	2	1	4		
23	7	6	8	2-3	1	4		
24	7	6	8-5	3	1	4		

PASSES								
					_	_		
	Α	В	С	D	E	F		
1	С	-	A	F		D		
2	*	С	В	-	F	E		
3	В	Α	-	Е	D	*		
4	С	*	Α	F	-	D		
5	-	С	В	*	F	Е		
6	В	Α	*	Е	D	-		
7	С	-	Α	F	*	D		
8	*	С	В	-	F	Ε		
9	В	Α	-	Е	D	*		
10	С	*	Α	F	-	D		
11	-	С	В	*	F	Ε		
12	В	Α	*	Е	D	-		
13	С	-	Α	F	*	D		
14	*	С	В	-	F	Е		
15	В	Α	-	Ε	D	*		
16	С	*	Α	F	-	D		
17	-	С	В	*	F	Ε		
18	В	Α	*	Е	D	-		
19	С	-	Α	F	*	D		
20	*	С	В	-	F	Ε		
21	В	Α	-	Ε	D	*		
22	С	*	Α	F	-	D		
23	-	С	В	*	F	Е		
24	В	Α	*	Ε	D	-		





Pattern. Overlapping chocolate-bar 3-count feed

ABC DEFG

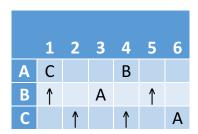
D & G do 3-count; A & C chocolate bar; C,E, & F double 3-count; B does a tough 1-count (hard to do and hard to remember!).

7 jugglers/ both hands counting	1	2	3	4	5	6	7	8	9	10	11	12
A	D	E			E	F			F	D		
В	E	F	F	D	F	G	D	E	G	E	E	F
С			G	Е			Е	F			F	G
D	Α			В			В			Α		
Е	В	Α		С	Α		С	В		В	В	
F		В	В		В	Α		С	Α		С	В
G			С			В			В			С

First tried by MAJ, Sunday Aug 13, 2017

Pattern. **Up-Up-Over**

A B C



First tried by Steve and Mike when Madfest was still at Memorial Union, in early 90's

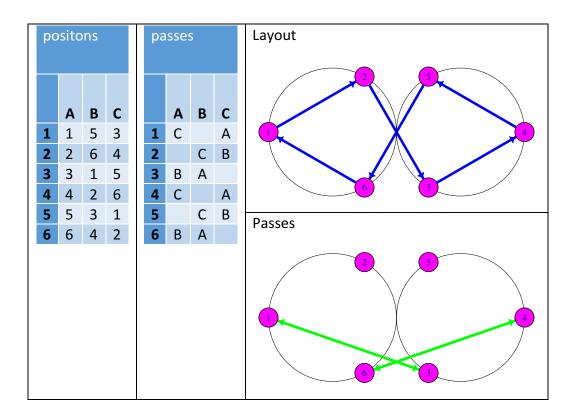
Pattern. **Foi Graham**

ABC DEF

positons								
			6		_	_		
	Α	В	C	D	Ε	F		
1	1	9	5	5'	9'	1'		
2	2	10	6	6'	10'	2'		
3	3	11	7	7′	11'	3'		
4	4	12	8	8′	12'	4'		
5	5	1	9	9'	1'	5'		
6	6	2	10	10'	2′	6'		
7	7	3	11	11'	3′	7′		
8	8	4	12	12'	4'	8'		
9	9	5	1	1'	5'	9'		
10	10	6	2	2′	6'	10'		
11	11	7	3	3'	7′	11'		
12	12	8	4	4'	8'	12'		

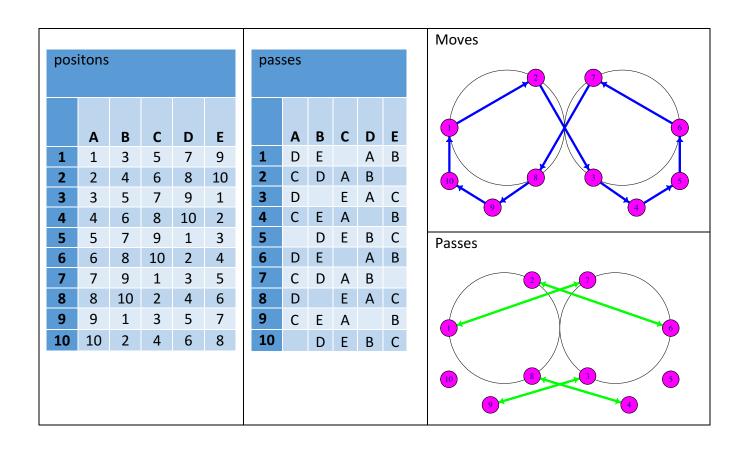
passes									
	Α	В	С	D	E	F			
1	F					Α			
2		Е			В				
3		D	E	В	С				
4	Ε	F			Α	В			
5		E			В				
6			D	С					
7	D		F	Α		С			
8		D	Е	В	С				
9			D	С					
10	F					Α			
11	Ε	F			Α	В			
12	D		F	Α		С			

Pattern. 2 pi/3. Three moving jugglers, A, B, and C; six passing beats (on count of choice; rows of tables) for full cycle. Everyone moves through the figure eight; in contrast to a Turbo or Bruno's nightmare, there is not a feeder being swapped here; all folks are moving all the time. Four count is fun; three count is more fun. In any count, it's pass-one, pass-the other, self. Whatever is the base count the pattern has a gap (in this layout, positions 2 and 5) where you can plug in any other juggler or pattern that matches that count (including three other jugglers doing a 2pi/3!). Looks like two pies when viewed from above, and it's 3 jugglers. Plus, each circle in the layout is divided into 3, hence the name. Lots of 2pi/3 from summer 2017.



Variations: add one feeder to fill the gap (4 jugglers); `mate` two 2pi/3's to fill both gaps (6 jugglers); do that switching sides or not; slow to six count then add more passes (Tomify) by making each juggler do pass-pass-pass per row

Pattern. Ivy pi (first tried Aug 27/17; Mike, Mel, Conor, Nick, Jason)



Pattern. **Apollo**

A B C D E

Pattern. Chocolate feeds

A B C D E E D C B

standard

wedge

Pattern. Theatre-style popcorn

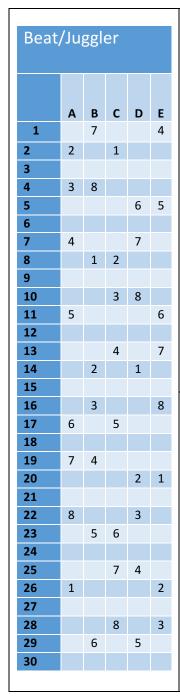
Α

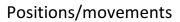
В

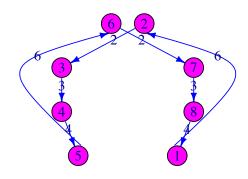
C

D E F

Pattern: Egg Beater switching handles [5 jugglers]. (first done Nov 2, 17 by Graham=A, Mel=B, Mike=C, Jeff=D, Nick=E; nickname EggBeatOff) The table shows positions where each juggler (column) must be at that passing beat [right-hand counting in rows]. Only passes are indicated. So positions 1-2 exchange, similarly 3-8, 4-7, and 5-6. The first graph shows where each juggler moves; edge weights indicate number of right-hand counts up to next throw. Right graph shows passing events. Start with jugglers at 4, 7, near 1, 2, and on the edge moving towards 6. There are 30 right hand beats to get around, which seems excessive but doesn't feel so bad when juggling, thanks to symmetries I guess.



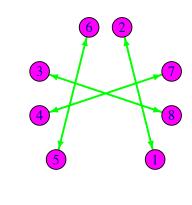




Start: A near 2; B at 4; C near 1; D moving towards 6; E at 7

Table entries show position of receiver of pass from juggler (column)

Passes



Pattern. Mel's 3-5 Foi-Graham (first tried Dec 1/17; Mike, Mel, Conor, Peter, Graham, Chan, Mark, Jeff)

ABC DEFGH

Pattern. **feed**

Α

B C D