

	A	B	C	D	E	F	G	H
1	Grady Sullivan							
2	10/8/2019			Chance of Heads (part b)	Chance of Heads (part c)			
3	ECE 202 - E3			50%	60%			
4	N "weighted" coins							
5				Chance of Tails (part b)	Chance of Tails (part c)			
6	number of coins (N)	10		50%	40%			
7	number of microstate (2^N)	1024						
8	number of macrostates (1+N)	11						
9								
10	Macrostates (n heads showing)	# of Microstates	Probability P(n)	Probability (weighted) P(n) - 50/50	Probability (weighted) P(n) - 60/40	Check: Probability Difference (between column C and D)		
11	0	1	0%	0%	0%	0%		
12	1	10	1%	1%	0%	0%		
13	2	45	4%	4%	1%	0%		
14	3	120	12%	12%	4%	0%		
15	4	210	21%	21%	11%	0%		
16	5	252	25%	25%	20%	0%		
17	6	210	21%	21%	25%	0%		
18	7	120	12%	12%	21%	0%		
19	8	45	4%	4%	12%	0%		
20	9	10	1%	1%	4%	0%		
21	10	1	0%	0%	1%	0%		
22								
23	TOTAL # of microstates (sum)	1024	100.00%	100.00%	100.00%			
24				5 heads is most likely to occur	6 heads is most likely to occur			
25	CHECK total # of microstates	0						
26	(should be zero)							
27								
28	check total probability		100%	100%	100%			
29	(should be 1 or 100%)							