

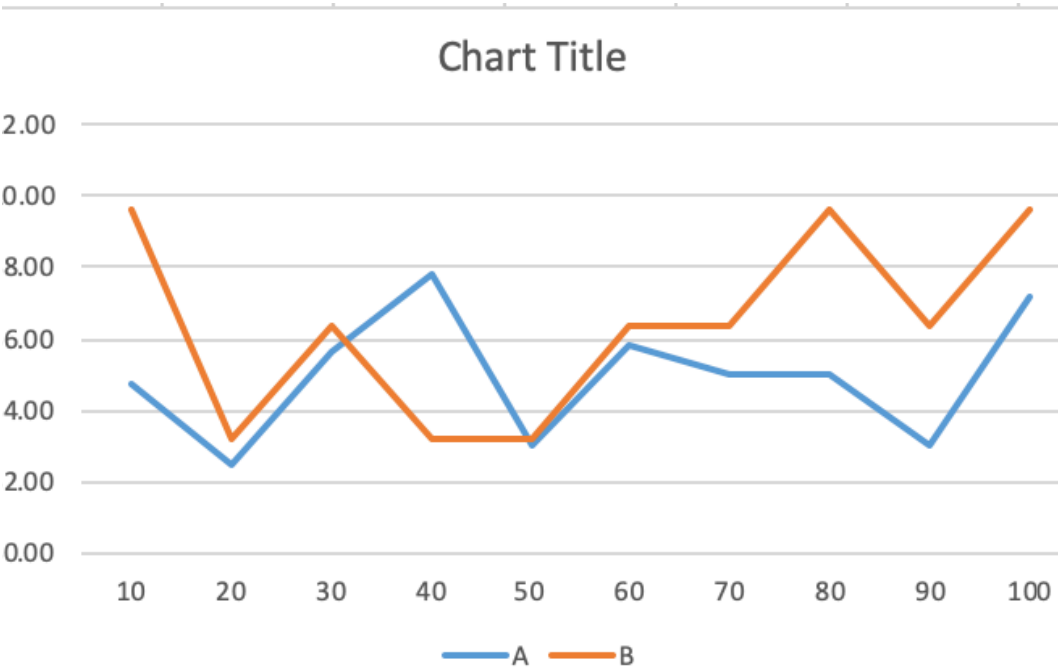
clkehl01 HW1
CECS 622

1. Generate 500 outcomes rolling a fair die. Compute the averages and standard deviation of the outcomes.

	X	RAND()	Die		
1	0.17	0.004866	1		Random Stats
2	0.33	0.893182	6		Average 0.49
3	0.50	0.994022	6		STDEV 0.290991
4	0.67	0.294371	2		
5	0.83	0.354916	3		Die Stats
6	1.00	0.081343	1		Average 3.434
		0.97932	6		STDEV 1.705127
		0.837583	6		
		0.132761	1		

2. Simulate the die game with two plays as defined at the end of lecture two. Analysis: Compare the average wins in case win of plays A and B using N=100. Compare the results with expected wins.

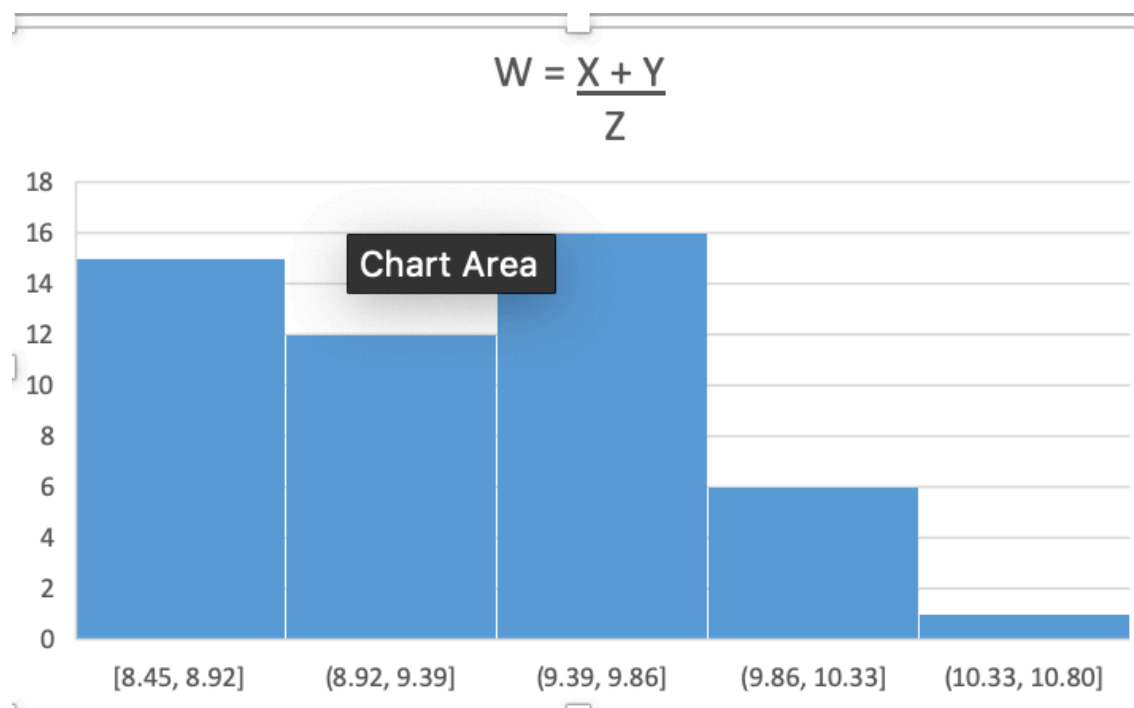
	Total A	\$496.00
	Total B	\$640.00
Average Amount Won A		\$4.96
Average Amount Won B		\$6.40



10	\$4.70	\$9.60
20	\$2.50	\$3.20
30	\$5.60	\$6.40
40	\$7.80	\$3.20
50	\$3.00	\$3.20
60	\$5.80	\$6.40
70	\$5.00	\$6.40
80	\$5.00	\$9.60
90	\$3.00	\$6.40

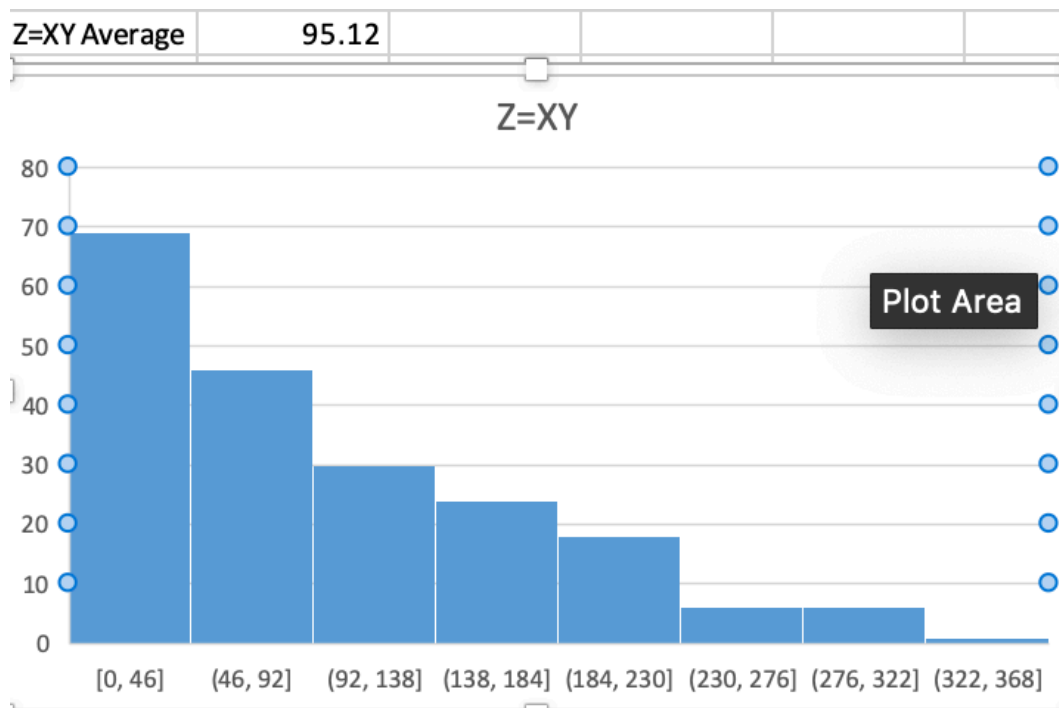
X		A Rand()	DIE Roll	Money Made	B RAND()	DIE Roll	Money Made	
1	0.17	0.329377	2	\$2.00	0.910615	6	\$32.00	
2	0.33	0.406014	3	\$4.00	0.093314	1	\$0.00	
3	0.50	0.883037	6	\$0.00	0.026675	1	\$0.00	
4	0.67	0.875572	6	\$0.00	0.171276	2	\$0.00	
5	0.83	0.719692	5	\$16.00	0.92648	6	\$32.00	
6	1.00	0.838382	6	\$0.00	0.439946	3	\$0.00	
		0.580041	4	\$8.00	0.234889	2	\$0.00	
		0.992527	6	\$0.00	0.624588	4	\$0.00	
		0.760574	5	\$16.00	0.924151	6	\$32.00	

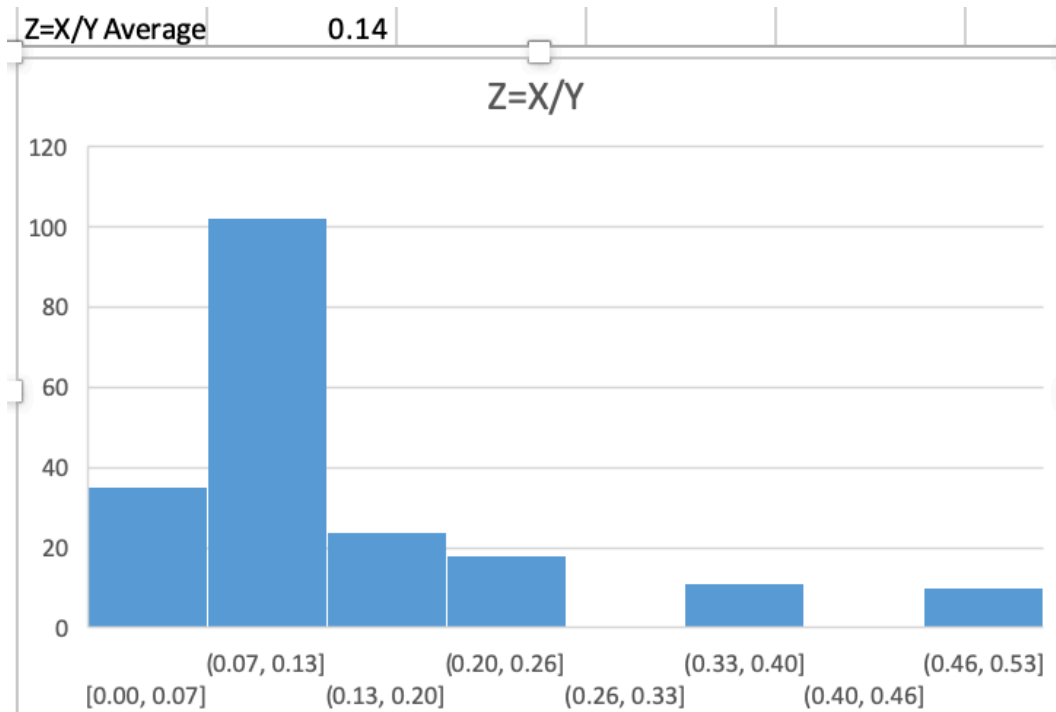
3. Page 79 #5



	RNNx	X	RNNy	Y	RNNz	Z	W
1	0.46	104.60	0.48	307.26	0.07	40.53	10.16
2	0.12	101.24	0.55	308.26	0.86	46.87	8.74
3	0.72	107.23	0.04	300.54	0.90	47.20	8.64
4	0.14	101.43	0.52	307.73	0.59	44.69	9.16
5	0.17	101.71	0.97	314.60	0.22	41.73	9.98
6	0.27	102.68	0.81	312.13	0.20	41.62	9.97
7	0.22	102.17	0.52	307.86	0.97	47.80	8.58
8	0.69	106.92	0.19	302.81	0.56	44.44	9.22
9	0.57	105.65	0.61	309.22	0.19	41.53	9.99
10	0.32	103.24	0.90	313.43	0.22	41.76	9.98

4. Pg 81 #9





RNNx	X	RNNy	Y	Z	z
4	14	1	11	154	0.09
6	16	-5	5	80	0.20
2	12	-2	8	96	0.13
-5	5	5	15	75	0.07
10	20	1	11	220	0.09
-9	1	8	18	18	0.06
10	20	6	16	320	0.06
3	13	-8	2	26	0.50
7	17	-4	6	102	0.17

