Lab 5 (November 8, 2016)
Potapiuk Aleksei, AS-36

My rules:

IF SPEED=	AND DISTANCE =	THEN BREAK=
Very Slow	Very Short	very weak
Very Slow	Short	very weak
Very Slow	Medium	very weak
Very Slow	Long	very weak
Very Slow	Very Long	very weak
Slow	Very Short	weak
Slow	Short	weak
Slow	Medium	Medium
Slow	Long	very weak
Slow	Very Long	very weak
Medium	Very Short	strong
Medium	Short	strong
Medium	Medium	very weak
Medium	Long	weak
Medium	Very Long	very weak
Fast	Very Short	very strong
Fast	Short	very strong
Fast	Medium	medium
Fast	Long	weak
Fast	Very Long	very weak
Very Fast	Very Short	strong
Very Fast	Short	strong
Very Fast	Medium	medium
Very Fast	Long	weak
Very Fast	Very Long	very weak

Table with all speeds{0,1,2,3...19,20}, distances{0,50,100... 950,1000}

Speed 0- 9

Distance	0	1	2	3	4	5	6	7	8	9	SPEED
0	6,0000	6,0000	6,0000	7,1250	7,8667	8,3243	8,6364	8,6364	8,6364	8,6364	
50	6,0000	6,0000	6,0000	7,1250	7,8667	8,3243	8,6364	8,6364	8,6364	8,6364	
100	6,0000	6,0000	6,0000	7,1250	7,8667	8,3243	8,6364	8,6364	8,6364	8,6364	
150	5,3750	5,3750	5,3750	6,6800	7,2778	7,6250	7,8667	7,8667	7,8667	7,8667	
200	4,5000	4,2494	4,2494	2,7303	5,3750	5,7647	6,0000	6,0000	6,0000	6,0000	
250	4,0625	4,0625	4,0625	4,2494	4,8500	5,1905	5,7647	5,7647	5,6667	5,7647	
300	3,6250	3,6250	3,6250	4,2095	4,2494	4,8500	5,3750	5,3750	5,3750	5,3750	
350	3,2353	3,2353	3,2353	3,8095	4,2095	4,2494	2,7303	2,7303	5,0833	2,7303	
400	3,0000	3,0000	3,0000	3,2353	3,6250	4,0625	4,2494	4,2494	4,2494	4,2494	
450	2,2857	2,2857	2,2857	2,5217	2,7727	3,0435	4,0625	4,0625	3,9167	4,0625	
500	1,6667	1,6667	1,6667	1,9231	2,2667	2,7727	3,6250	3,6250	3,6250	3,6250	
550	1,2143	1,2143	1,2143	1,5484	1,9231	2,5217	3,2353	3,2353	3,3333	3,2353	
600	0,8750	0,8750	0,8750	1,2143	1,6667	2,2857	3,0000	3,0000	3,0000	3,0000	
650	0,8750	0,8750	0,8750	1,2143	1,6667	2,2857	3,0000	2,2857	2,0625	2,2857	
700	0,8750	0,8750	0,8750	1,2785	1,6667	2,0625	3,0000	2,0625	1,6667	1,6667	
750	0,8750	0,8750	0,8750	1,2143	1,6667	2,2857	3,0000	2,2857	1,6667	1,2143	
800	0,8750	0,8750	0,8750	1,2143	1,6667	2,2857	3,0000	2,2857	1,6667	1,2143	
850	0,8750	0,8750	0,8750	1,2143	1,6667	2,2857	3,0000	2,2857	1,6667	1,2143	
900	0,8750	0,8750	0,8750	1,2143	1,6667	2,2857	3,0000	2,2857	1,6667	1,2143	
950	0,8750	0,8750	0,8750	1,2143	1,6667	2,2857	3,0000	2,2857	1,6667	1,2143	
1000	0,8750	0,8750	0,8750	1,2143	1,6667	2,2857	3,0000	2,2857	1,6667	1,2143	
DISTANCE											

SPEED 10-20

Distance	10	11	12	13	14	15	16	17	18	19	20	SPEED
0	8,6364	8,6364	8,6364	8,6364	8,6364	8,6364	8,6364	8,6364	8,6364	8,6364	8,6364	
50	8,6364	8,6364	8,6364	8,6364	8,6364	8,6364	8,6364	8,6364	8,6364	8,6364	8,6364	
100	8,6364	8,6364	8,6364	8,6364	8,6364	8,6364	8,6364	8,6364	8,6364	8,6364	8,6364	
150	7,8667	7,8667	7,8667	7,8667	7,8667	7,8667	7,8667	8,1923	8,6364	8,6364	8,6364	
200	6,0000	6,0000	6,0000	6,0000	6,0000	7,1250	7,8667	8,3243	8,6364	8,6364	8,6364	
250	5,7647	5,7647	5,6667	5,7647	6,0000	7,1250	7,8667	8,3243	8,3243	8,3243	8,3243	
300	5,3750	5,3750	5,3750	5,6667	6,0000	7,4211	7,8667	7,8667	7,8667	7,8667	7,8667	
350	2,7303	2,7303	5,3750	5,7647	6,0000	7,1250	7,4211	7,1250	7,1250	7,1250	7,1250	
400	4,2494	2,7303	5,3750	5,7647	6,0000	6,0000	6,0000	6,0000	6,0000	6,0000	6,0000	
450	4,0625	4,2494	4,8500	5,1905	5,7647	5,7647	5,6667	5,7647	5,7647	5,7647	5,7647	
500	3,6250	4,2095	4,2494	4,8500	5,3750	5,3750	5,3750	5,3750	5,3750	5,3750	5,3750	
550	3,2353	3,8095	4,2095	4,2494	2,7303	2,7303	5,0833	2,7303	2,7303	2,7303	2,7303	
600	3,0000	3,2353	3,6250	4,0625	4,2494	4,2494	4,2494	4,2494	4,2494	4,2494	4,2494	
650	2,2857	2,5217	2,7727	3,0435	4,0625	4,0625	3,9167	4,0625	4,0625	4,0625	4,0625	
700	1,6667	1,9231	2,2667	2,7727	3,6250	3,6250	3,6250	3,6250	3,6250	3,6250	3,6250	
750	1,2143	1,5484	1,9231	2,5217	3,2353	3,2353	3,3333	3,2353	3,2353	3,2353	3,2353	
800	0,8750	1,2143	1,6667	2,2857	3,0000	3,0000	3,0000	3,0000	3,0000	3,0000	3,0000	
850	0,8750	1,2143	1,6667	2,2857	3,0000	3,0000	3,0000	3,0000	3,0000	3,0000	3,0000	
900	0,8750	1,2143	1,6667	2,2857	3,0000	3,0000	3,0000	3,0000	3,0000	3,0000	3,0000	
950	0,8750	1,2143	1,6667	2,2857	3,0000	3,0000	3,0000	3,0000	3,0000	3,0000	3,0000	
1000	0,8750	1,2143	1,6667	2,2857	3,0000	3,0000	3,0000	3,0000	3,0000	3,0000	3,0000	
DISTANCE												

My snapshots:

1st:

RED TRAIN: Speed: 19   Distance: 499   Break: 5
**BLACK TRAIN:** Speed: 16   Distance: 506   Break: 5

Speed	Distance	Break
5.375	19	500
5.375	16	500

2nd:
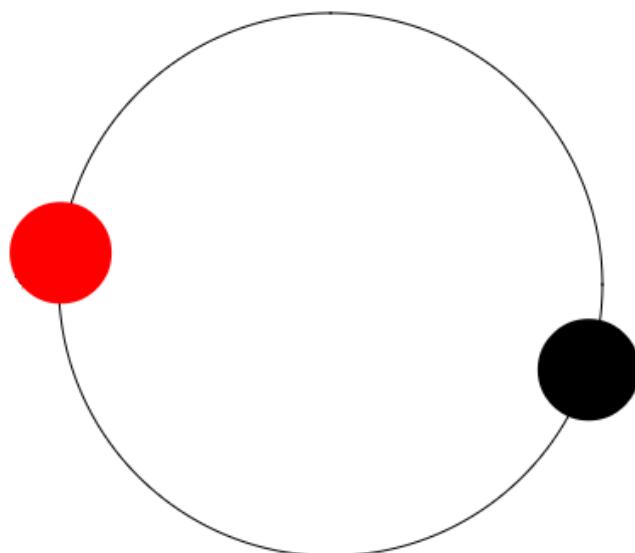
RED TRAIN: Speed: 11   Distance: 536   Break: 4
BLACK TRAIN: Speed: 14   Distance: 469   Break: 6

Speed	Distance	Break
3.8095238095238093	11	550
5.764705882352941	14	450

3rd:
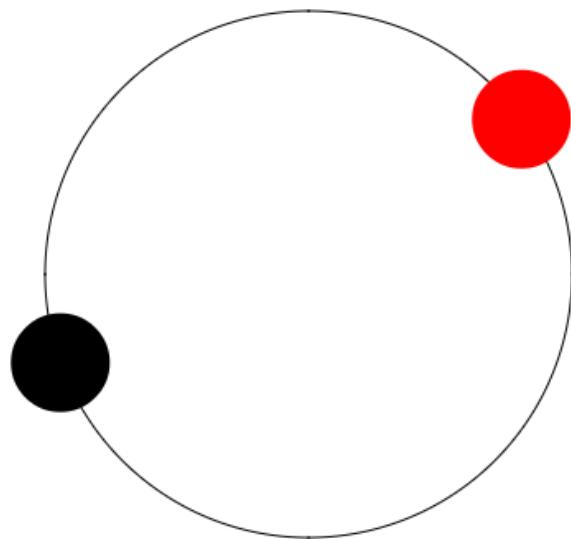
RED TRAIN: Speed: 17   Distance: 546   Break: 5
BLACK TRAIN: Speed: 10   Distance: 459   Break: 4

Speed	Distance	Break
4.0625	10	450
5,2730	17	550

4th:
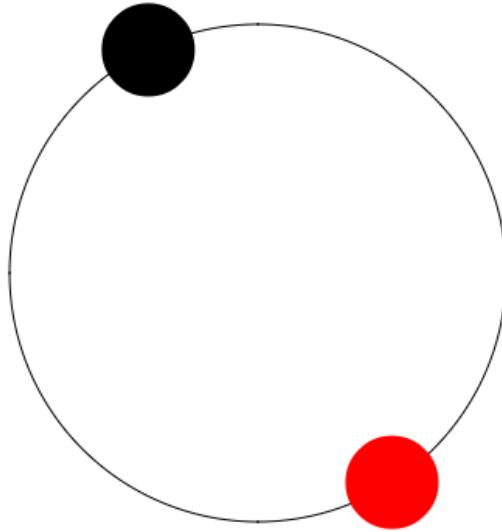
RED TRAIN: Speed: 4   Distance: 523   Break: 2
BLACK TRAIN: Speed: 10   Distance: 482   Break: 4

Speed	Distance	Break
2.2666666666666666	4	500
3.625	10	500

5th:
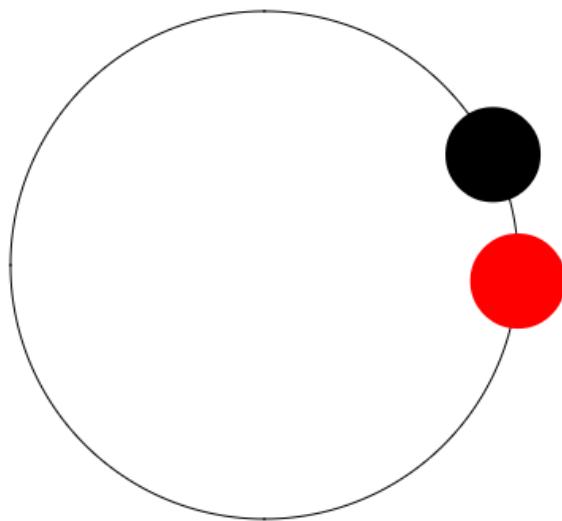
RED TRAIN: Speed: 19   Distance: 924   Break: 3
BLACK TRAIN: Speed: 14   Distance: 81   Break: 9

Speed	Distance	Break
8.636363636363637	14	100
3.0000000000000004	19	900