

Westminster Labyrinth Modified GUI Move Tile Calculations and Calculator *

Straight Lines Speed 100,100			Constant
dist in cm		Pause t	0.08451
32.5		2.746575	

Arc	a†	b†	R cm	d cm
	100	66	35	14.5
ω (angle)	360	59	Radius of Arc	Dist btwn Wheels
Pause t	22.43441	3.676751		

Color Legend for Both Calculators Above

	Input Data Here		Calculated Speed
	Calculated Pause t		

† a & b may swap due to curve direction

π = 3.141593

Table One of Lines, Arcs and Turns					
# & Type	ω (angle)	a	b	Pause t	Loop #
0 - Line	n/a	100	100	2.30	n/a
A - L90ish	70	-49	100	1.00	n/a
1 - Arc	145	100	35	4.75	n/a
B - L180	180	-49	100	2.70	n/a
2 - Arc	70 (140)	47	100	2.80	2
C - R180	180	100	-49	2.70	n/a
3 - Arc	50	100	55	2.50	n/a
B - L180	180	-49	100	2.70	n/a
4 - Arc	60	61	100	3.30	n/a
C - R180	180	100	-49	2.70	n/a
5 - Arc	78 (156)	100	66	4.85	2
C - R180	180	100	-49	2.70	n/a
6 - Arc	70	61	100	3.80	n/a
B - L180	180	-49	100	2.70	n/a
7 - Arc	83 (166)	100	55	3.95	2
C - R180	180	100	-49	2.70	n/a

Table Two of Lines, Arcs and Turns					
# & Type	ω (angle)	a	b	Pause t	Loop #
8 - Arc	70	47	100	2.80	n/a
B - L180	180	-49	100	2.70	n/a
9 - Arc	150	100	35	4.90	n/a
B - L180	180	-49	100	2.70	n/a
10 - Arc	60	47	100	2.40	n/a
C - R180	180	100	-49	2.70	n/a
11 - Arc	65	100	55	3.10	n/a
B - L180	180	-49	100	2.70	n/a
12 - Arc	83 (166)	61	100	4.55	2
C - R180	180	100	-49	2.70	n/a
13 - Arc	59 (178)	100	66	3.70	3
D - R90	90	100	-49	1.30	n/a
14 - Line	n/a	100	100	2.75	n/a

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* Inspired by Nikos Giannakopoulos Artist Robot and S2 work and created by T. Whitfield Stodghill, III - May 2015