

PENDULUM Torlo Povilić-Podlić;

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I took this experiment seriously and I really did investigate how the period of pendulum varies with its length.

I took liberty to work with longer string length than originally given. Through my testing I've found out that at some lengths the period doubles, for example at 1.6m and 0.4m. I am giving the results of my measurements below. I also found out that I get similar results only for small angles. I give samples for big angle below from which it's obvious that the period is much longer.

φ	$l_1 = 1.6\text{m}$		T_1		
6°	25	25.3	25.1	2.5	} 1.6m (string)
12°	25.5	25.4	25.1	2.5	
60°	26.9	26.4	26.3	2.7	
	$l_2 = 0.4$		T_2		
6°	12.5	12.6	12.6	1.26	} 0.4m (string)
12°	12.8	12.7	12.7	1.27	
60°	13.9	13.7	13.6	1.37	