A Physics Interactive Quiz : Circular Motion Name:

	#	1	question	Answer	0	<--score
#	1	5	kg is the mass of a bucket swinging parallel to the ground with velocity 8 m/s and radius 1.2 meters. Find the centrifugal force on the bucket		0	
#	2	5	What is the period of the bucket above?		0	
#	3	5	The same bucket is now swung perpendicular to the ground. What is the period needed to keep the bucket from splashing the spinner?		0	
#	4	5	When just weightless at the top, what will be the tension in the rope at the bottom?		0	
#	5	1200	kg is the mass of a car rounding a non-banked 200 m turn at 40 m/s. Find the μ required to stay on the road.		0	
#	6	100	meters is the radius of a wheel shaped space station with 0.2 g near the rim. Find the period of the space station		0	
#	7	100	find the velocity of an astronaut on this rim		0	
#	8	50	kg is the mass of the astronaut. Find her weight in Newtons		0	
#	9	4	kg is the mass of your waterbottle on planet Zot, where Mz is 12 ee 24 kg and Rz is 8 ee 6 m. Find the force on your waterbottle		0	
#	10	2	times the radius of the earth around the sun a new planet is discovered. What will its period be in days?		0	

Extra Credit: Explain how cars can become weightless driving over small hills in the road