Physics A Midterm exam page two Name:

	#	4	question	Answer	0	<--score
#	1	400	grams is the mass of a bullet shot from a gun with a barrel 40 cm long, with Vf of 400 m/s. Find the force on the bullet		0	
#	2	400	Find the final KE for the bullet		0	
#	3	400	Find the ultimate altitude of the bullet if shot upwards		0	
#	4	16	meters is the height of a hill Ben runs up in 7.5 seconds. Find his horsepower if his mass is 75 kg		0	
#	5	20	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	
#	6	20	What is the period of the bucket above?		0	
#	7	16	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	
#	8	32	cm is the length of a wrench turning a bolt. If a force of 60 N were applied 90° to the handle, find the torque on the bolt.		0	
#	9	200	kg is the mass of a child on one side of a 6 meter long seesaw, with her brother of mass 40 kg on the other end. Find the net torque.		0	
#	10	1600	kg is the mass of a 6 meter diving board with a 100 kg person on the end, and supports 2 meters apart. Find the force on the center support.		0	

Extra Credit: